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SSPORTS ENVIRONMENTAL
DETACHMENT

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POST OFFICE BOX 2135, VALLEJO CA 94592-2135

POLYCHLORINATED BIPHENYL (PCB) ASSESSMENT

FOR

PARCEL 01-C

PREPARED FOR


ENGINEERING FIELD ACTIVITY-WEST
NAVAL FACILITIES ENGINEERING COMMAND
SAN BRUNO, CALIFORNIA

REVISION A
AUGUST 22, 1996

PREPARED BY:

R. L. BRIANS
PCB ASSESSMENT AND SAMPLING
SSPORTS ENVIRONMENTAL DETACHMENT
P. O. BOX 2135,
VALLEJO, CA 94592-2135

APPROVED BY:

 8/26
F. E. PAINE DATE

PROJECT MANAGER
PCB ASSESSMENT AND SAMPLING
SSPORTS ENVIRONMENTAL DETACHMENT
CODE 120PCB, P. O. BOX 2135,
VALLEJO, CA 94592-2135

REFERENCES:

- (a) Mare Island Naval Shipyard 1994 Historical Building Survey
- (b) General Radioactive Material (G-RAM) Radiological Survey Plan for Decommissioning of Mare Island Naval Shipyard.
- (c) Shipyard Basewide Environmental Baseline Survey Report (EBS)
- (d) Work Plan, PCB Survey and Sampling for Possible Spill Sites
- (e) Work Plan, PCB Survey and Sampling for Mechanical Machinery
- (f) Yard Route Slip, Facility Closure Recommendation for Parcel 01-C, dated 11-17-95
- (g) Yard Route Slips, Facility Closure, Building 627 TWD PCB Sample Results-BRAC Building Closure, dated 9-16-94 and 10-13-94
- (h) Environmental Protection Agency (EPA) Field Manual for Grid Sampling of Polychlorinated Biphenyl (PCB) Spill Sites to Verify Cleanup
- (i) 40 Code of Federal Regulations (CFR) Part 761
- (j) 40 CFR Part 761 Proposed Rules, Federal Register December 6, 1994
- (k) US EPA SW846 Test Methods for Evaluating Solid Waste, Physical/Chemical Methods
- (l) San Francisco Bay Public Works Center Transformer List
- (m) Facsimile dated 7-17-96 from EFA-WEST, San Bruno, i.e. Securing the Third Floor and Remediation of the First Floor for Building 627
- (n) SSPTS Route Slip, Securing the Third Floor of Building 627, dated 7/18/96
- (o) PCB Decontamination Technical Work Document (TWD) Number 96-1280, dated 7/18/96



ENCLOSURES:

- (1) Property Site Map of Parcel 01-C
- (2) Site Map of Parcel 01-C with Samples
- (3) Floor Plans of Building 627 with PCB Concentrations
- (4) Analytical Laboratory Reports for Parcel 01-C from CalScience Environmental Laboratories dated 4-12-96
- (5) Secured Locations on the Second and Third Floor Mezzanines of Building 627
- (6) First Floor Location of Remediation Cleanup for Building 627
- (7) Initial Grid Samples and Additional Random Sample Locations for Building 627
- (8) Sample Locations for the First Floor of Building 627 after Remediation
- (9) Initial Analytical Laboratory Reports for Building 627 from AnLab Analytical Laboratory and CalScience Environmental Laboratories with various dates
- (10) Final Analytical Laboratory Reports for Building 627 from SSPTS Environmental Detachment Laboratory and CalScience Environmental Laboratories with various dates



Rev.	Description	Approval	Date
A	Added changes to incorporate data to release Building 627 in Parcel 01-C.	<i>J. Panie</i>	8/26/96

PURPOSE:

Superintendent of Ships Portsmouth Virginia (SSPORTS) Environmental Detachment, Vallejo, Technical Division, Code 120 Polychlorinated Biphenyl (PCB) Branch received direction by Engineering Field Activity - West (EFA-WEST) to investigate certain properties at Mare Island Naval Shipyard (MINS) Site for the potential presence of PCB contamination. The investigation would provide necessary information on the existing conditions of these properties to EFA-WEST, property managers of MINS. With the results from the investigations EFA-WEST could certify to the City of Vallejo the status of the subject properties so the properties could be leased.



Code 120 PCB Branch was requested by EFA-WEST to secure access to the third floor mezzanine of Building 627 due to PCB contamination. Also, Code 120 PCB was requested to remediate a part of the first floor of the Building for PCB contamination. The requests were per Reference (m).

BACKGROUND:

The property discussed in this report is Parcel 01-C. It is bounded on the south by Parcel 01-B, bounded on the east by Cedar Avenue, Parcels 01-J2, 01-J3, bounded on the west by Parcel 01-A, and bounded on north by Parcel 01-D. See Enclosure (1) for Parcel 01-C's location. No portion of the parcel is under San Francisco Bay Public Works Center (PWC) cognizance.



Reference (n) directed SSPTS 130 to secure access to the third floor mezzanine of Building 627 due to PCB contamination. Also, a portion of the second floor mezzanine was secured to prevent access to the third floor mezzanine from the second floor mezzanine. Work was completed 7/25/96. See Enclosure (5).

Reference (o) directed SSPTS Code 130 to remediate a portion of the first floor of Building 627 for PCB contamination. See Enclosure (6) for the location. Work was completed 8/3/96.

HISTORY:

Parcel 01-C was open land prior to 1922. From 1922 until 1941 the parcel was part of the Marine's rifle range. Building 627 was constructed on the parcel in 1943. Building 627 was originally used for ordinance storage. Prior to 1967 the building was a radium dial repair facility. In 1975 the building's use became a torpedo storage area. In 1980 the building was converted to the Preinstallation and Check Out (PITCO) for Naval Electronic Engineering Systems (NAVELEX) on sonar towed array systems as well as repairs for the systems. Parcel 01-C and Building 627 information is from References (a), (b), and PWC records.

Table One lists the Transformers past and present for Parcel 01-C. This information is from the PWC Transformer List. The Shipyard EBS, Reference (c), reports no PBS spills for Parcel 01-C. Other spills are listed in Table Two. Reference (c) does not report any Installation Restoration (IR) Sites for the parcel or building either. There are no Hazardous Waste Accumulation Areas (HWAA) on the parcel or in the building per Reference (c). There is one Solid Waste Management Unit (SWMU) for Parcel 01-C and Building 627. Its SWMU-123 and was for potential radium release. After investigation and sampling the parcel and building were released as free of any radium contamination by Reference (b). IR8 Site north of Building 629 in Parcel 01-D which is north of Parcel 01-C and Building 627 is for Lead Battery Storage and lead oxide deposits There is no record of impact on Parcel 01-C from this IR Site. The IR Site is noted here for record.

SAMPLING METHODOLOGY:

Parcel 01-C and Building 627 were surveyed and sampled in accordance with References (d) and (e).

Transformer pads and random stains in Parcel 01-C were sampled and are shown on Enclosure (2). Machinery in the parcel was sampled and released per Reference (f).

Building 627's machinery was sampled and released per Reference (g). The first, second, and third floors of Building 627 were sampled per Reference (h) using a grid layout. Swipe samples were taken on the first floor as it is smooth concrete. Solid samples were taken on the second and third floors as they are heavy timber construction. One sample on the first floor had a PCB concentration of 160 $\mu\text{g}/\text{sample}$ while others ranged from 0.4 to 5 $\mu\text{g}/\text{swipe}$. The area around the high concentration was cordoned off. See Enclosure (3) for approximate location. The second floor had a range of PCB concentrations from 0.46 ppm to 8.0 ppm. These are within the allowed action levels of Reference (i). The third floor had two samples with high PCB concentrations. One was 170,000 ppm and the other was 100 ppm. They were near each other. The area around these two samples was cordoned off also. See Enclosure (3) for approximate location. The other samples for the third floor ranged from 4.5 to 25 ppm. These are within the allowed action levels of Reference (i) also. Enclosure (3) recommends remediation is required for the PCB contamination in Building 627 with added sample characterization for the extent of the PCBs. See Enclosure (7) for the initial grid sample locations in Building 627.



Additional samples were taken on the first floor and third floor mezzanine to gain more background information of the PCB contamination. The elevator pit area was also sampled. Swipe samples were taken on the first floor and the elevator pit. Solid samples were taken on the third floor mezzanine. See Enclosure (7) for sample locations. Also, Reference (o) directed Code 130 to take new samples per the grid method of Reference (h) on the first floor area after it was cleaned for PCBs. See Enclosure (8) for new sample locations.

The samples were documented, processed, and tracked with a Chain of Custody in accordance with References (d), (e), (i), and (j). CalScience Environmental Laboratories and AnLab Analytical Laboratory did the initial analytical extractions and reports for Parcel 01-C and Building 627. SSPORTS Environmental Detachment Laboratory and CalScience Environmental Laboratories did the analytical extractions and reports for Building 627's additional samples and post cleanup samples. The laboratories accomplished the analytical extractions and analyses per the requirements of Reference (k). The laboratory reports are in Enclosure (4), (9), and (10).

LABORATORY RESULTS:

All analyses results for Parcel 01-C are in Enclosure (4) with laboratory Quality Assurance Data included. All samples for Parcel 01-C were non-detect for PCBs at reportable limits of 1 ppm for solid samples. This is below the 50 ppm action levels in Reference (i) and below the 2 ppm action level used to obtain regulatory closure of new spills on MINS. Machinery for the parcel and Building 627 were within the allowed PCB action levels of Reference (i). Building 627 had three high level PCB samples reported in the preceding paragraph and the ranges for the other PCBs in the building were noted also. The initial analyses for Building 627 are in Enclosure (9).



All the new analyses results for Building 627 are in Enclosure (10) with laboratory Quality Assurance Data included. These new samples were analyzed for PCBs at reportable limits of 5 $\mu\text{g}/100\text{cm}^2$ for swipe samples, 5 ppm for solid samples, and 10 ppb for water grabs. The reportable limits are below the action levels of Reference (i). All the swipes samples were taken on the first floor of the building on smooth concrete with no major cracks and on the metal catch tray of the elevator pit. They were all non-detect. The solid samples were taken in the wood flooring of the third floor mezzanine. The reportable limits of 5 ppm for these samples are above the 2 ppm action level for new spills on MINS but below the 50 ppm action level of Reference (i). These solid samples were non-detect at the 5 ppm level indicating low levels, but accepted levels, of PCBs are present. The water grab sample was taken from the collection tank used in the cleanup process of the first floor. It had a reportable detection of 14.7 ppb PCBs. This is within the allowed limits of Reference (i).

RECOMMENDATION:

With the definitions and action levels contained in Reference (i); previous agreements between Mare Island, the United States Environmental Protection Agency, and the California Department of Toxic Substances Control; and the data in Enclosure (4), it is recommended that the Parcel 01-C property, as shown in Enclosure (1), be considered free from PCB contamination. Based on the high concentrations of PCBs as indicated in Enclosure (3) and the other reported levels of PCBs in Building 627 that were noted above, required remediation and further sample characterization must take place prior to release of the building. EFA-WEST can confidently state that the Parcel 01-C is absent of PCB contamination and may be leased to the general public. EFA-WEST must consider remediation of PCBs for Building 627 prior to release to the general public for lease. Leasing portions of the building that do not have the high PCB concentrations may not be practical if remediation were to occur at the same time the building is occupied.



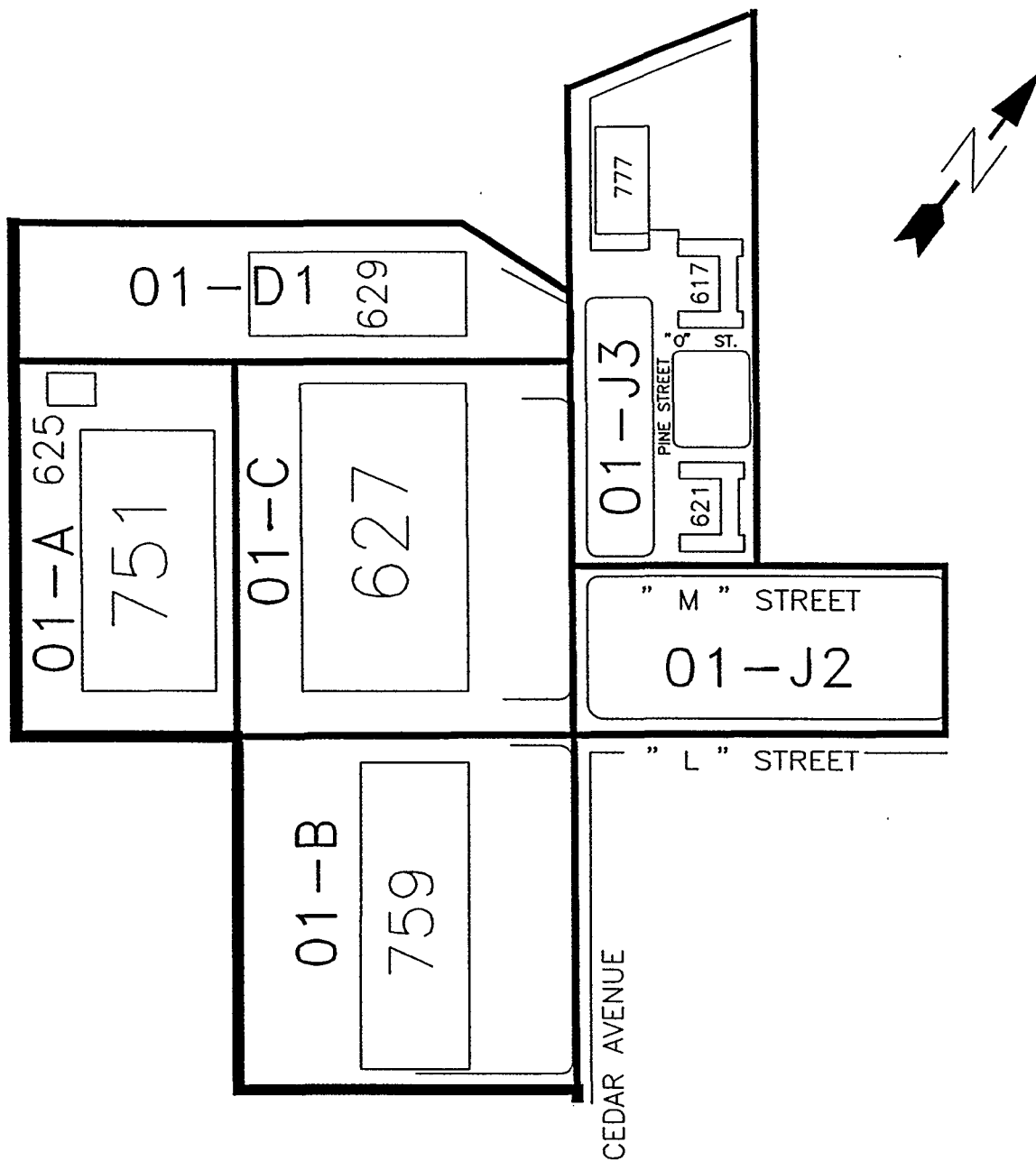
Based on the definitions and action levels contained in Reference (i); previous agreements between Mare Island, the United States Environmental Protection Agency, and the California Department of Toxic Substances Control; and with the additional data in Enclosures (9) and (10) it is recommended that Building 627, as part of Parcel 01-C, be considered PCB free, (not including those portions of the second and third floor mezzanines shown in Enclosure (5)). EFA-WEST can confidently state that Building 627 is absent of PCB contamination, except as noted above, and may be leased to the general public.

TABLE ONE
Electrical Transformer History is from the PWC Transformer List, Reference (l).

NUMBER	LOCATION	IN SERVICE	REMOVED	PCB	REMARKS
T-1013	Bldg 627	1-1-43	7-26-91	2.0ppm	To Hazmat Ctr for disposal
T-1195	Bldg 627	1-1-44	1-1-84	500ppm	To Hazmat Ctr for disposal
T-1626	Bldg 627	1-1-86	7-26-91	1.0ppm	To Hazmat Ctr for disposal
T-1956	Bldg 627	1-1-91	-----	0.0ppm	Non PCB per Manufacturer
T-1957	Bldg 627	1-1-91	-----	0.0ppm	Non PCB per Manufacturer
T-1965	Bldg 627	1-1-91	-----	0.0ppm	Dry Transformer
T-1992	Bldg 627	1-1-91	-----	0.0ppm	Non PCB per Manufacturer

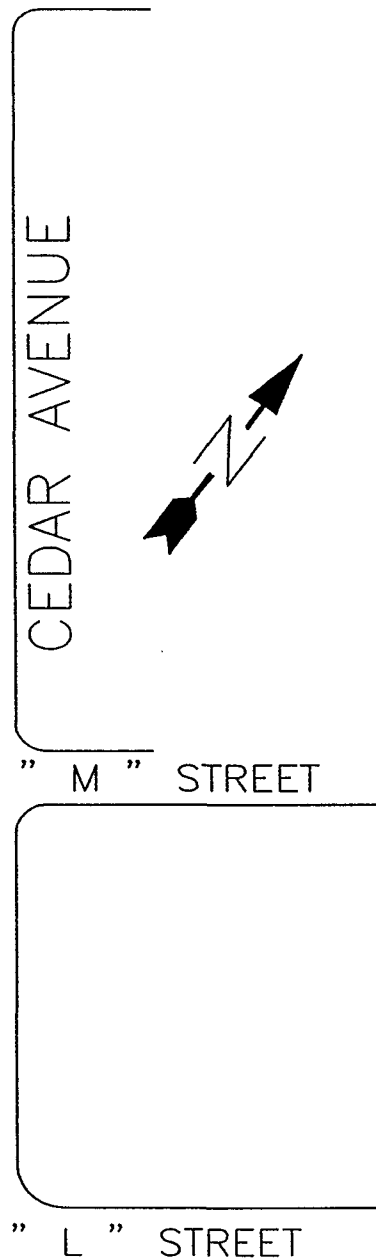
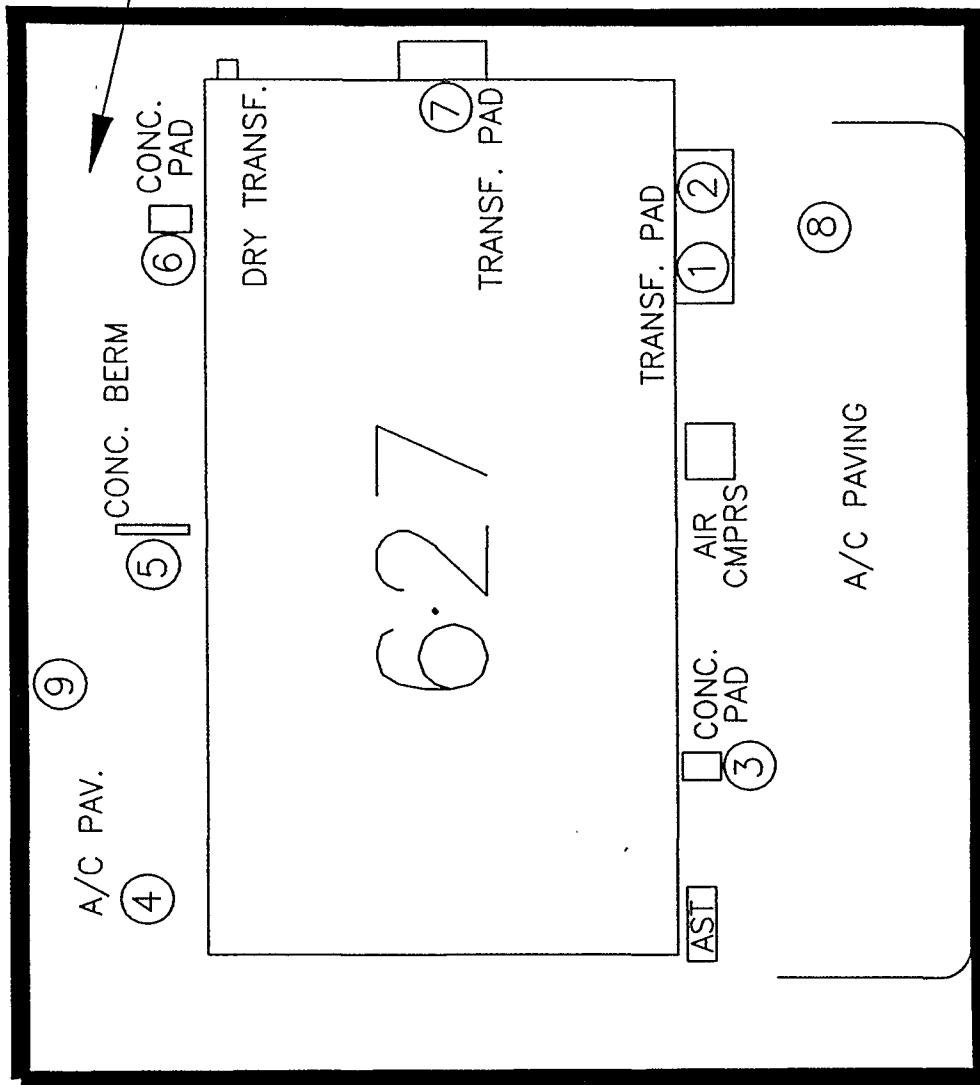
TABLE TWO
Spill Data History from Reference (c).

SPILLS	SUBSTANCE/QUANTITY	SPILL DATE	RELEASED TO
627	Hydraulic Oil/Ten Gals	12/1/88	Land
627	Oil/Two Gals	9/1/88	Land
627	Oil/Five Gals	9/1/88	Land



ENCL (1)

01 - C



LOC #	SAMPLE #	LOC #	SAMPLE #
1	6094-0298	5	6094-0302
2	6094-0299	6	6094-0303
3	6094-0300	7	6094-0304
4	6094-0301	8	6094-0305
		9	6094-0306

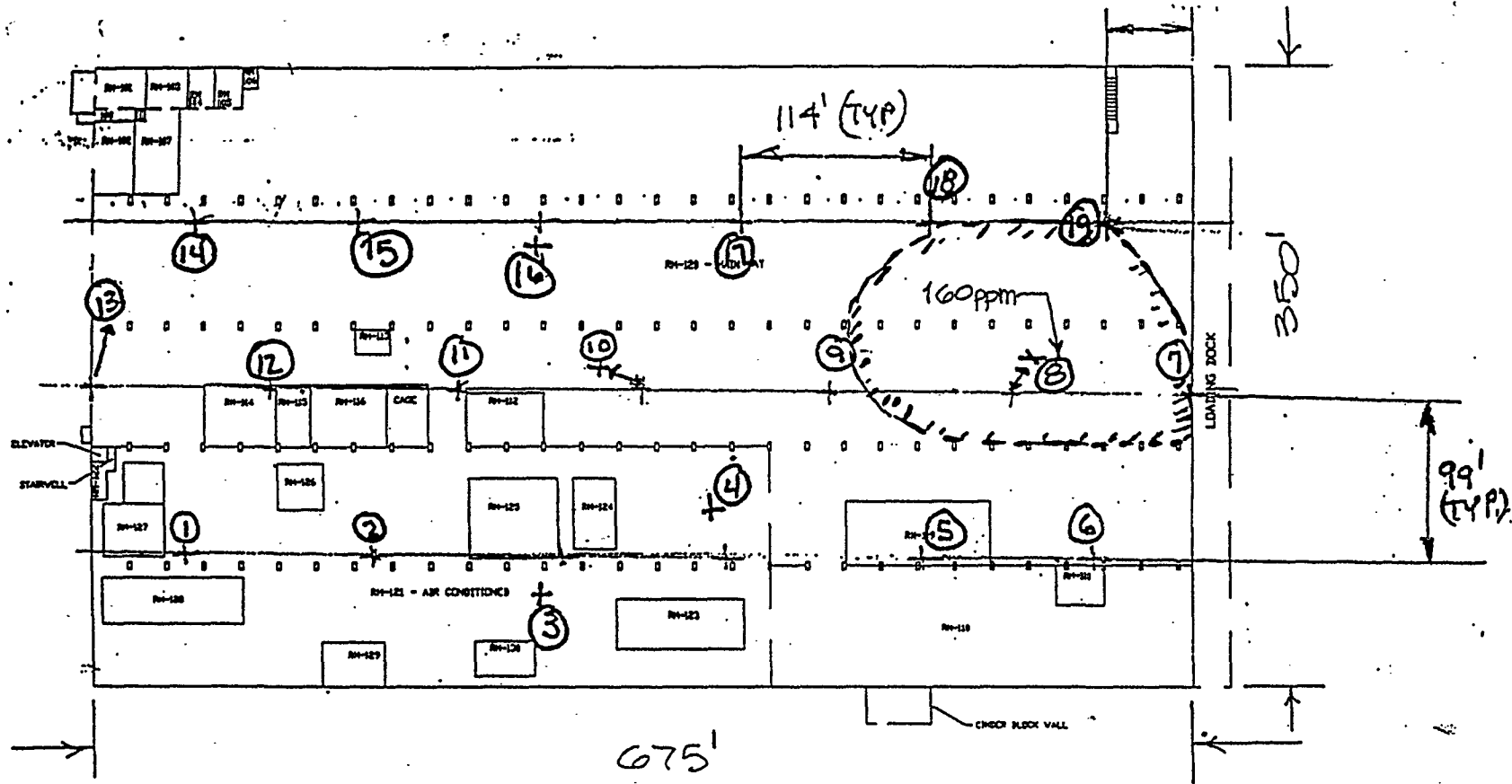
**MARE ISLAND NAVAL SHIPYARD
YARD ROUTE SLIP**

CODE: 106.32 PCB	STOP: T56	NAME: WAYNE SCHAFER	EXT:6-7617 FAX:6-6365	DATE: 10/25/95
<div style="display: flex; justify-content: space-between;"> [] ACTION [] COORDINATE [] PREPARE DRAFT [] RETENTION </div> <div style="display: flex; justify-content: space-between;"> [] AS DISCUSSED [] FILE [] PREPARE FOR SIGNATURE [] RETURN </div> <div style="display: flex; justify-content: space-between;"> [] COMMENT/CONCUR [X] INFORMATION [] REPORT BACK [] </div>				
TO CODE	INIT BY	DATE	SUBJECT: BUILDING 627 PCB CONTAMINATION	
106.32	<i>MS</i>	<i>10/31/95</i>	<p>C:627CONTM.YRS</p> <p>IN OCTOBER OF 1994 PCB SAMPLING AND INVESTIGATION WAS PERFORMED IN BUILDING 627 TO SUPPORT POTENTIAL TENANT LEASING. THIS SAMPLING WAS LIMITED IN SCOPE DUE TO SCHEDULE AND BUDGET. RECENT LEASING INQUIRY BY THE CITY OF VALLEJO VIA CODE 300EC HAS PROMPTED FURTHER SAMPLING USING THE MRI PCB GRID SAMPLING METHOD. THIS SAMPLING HAS PRODUCED THREE ACTION LEVEL PCB RESULTS 100PPM, 160PPM AND 170,000PPM. DUE TO THESE RESULTS THIS BUILDING MUST NOW BE CONSIDERED PCB CONTAMINATED. THE FOLLOWING IS PROVIDED FOR INFORMATION.</p> <p>1. THE CONTAMINATED SAMPLE LOCATION AREAS ARE ENCLOSED IN PCB TAPE BARRIERS AND POSTED, HOWEVER THE EXTENT OF THE CONTAMINATED AREA IS PRESENTLY UNKNOWN WITHOUT SPECIFIC SITE CHARACTERIZATION.</p> <p>2. EFA-WEST FACILITIES FUNDING FOR SITE CHARACTERIZATION AND CLEANUP IS CURRENTLY NOT AVAILABLE. THE REMAINING 40K OF THE ORIGINAL ALLOTMENT IS BEING USED FOR OTHER BUILDING CLOSURE AND SAMPLING EFFORTS AND WILL NOT SUPPORT AN EFFORT OF THIS SIZE. FURTHER ACTION TO CHARACTERIZE AND CLEANUP THIS BUILDING CAN ONLY BE ACCOMPLISHED WHEN FUNDING IS PROVIDED.</p>	
106.3	<i>u</i>	<i>11/4/95</i>		
300EC				
300CC				
CC:				
106.4PCB				
<i>106</i>				


MINS 5216/24 (Rev 1-85)

ENCLOSURE (3)

SHEET 1 OF 3



BUILDING 627: WAREHOUSE, GENERAL
FIRST FLOOR

 PCB CONTAMINATED
AREA.

NORTH

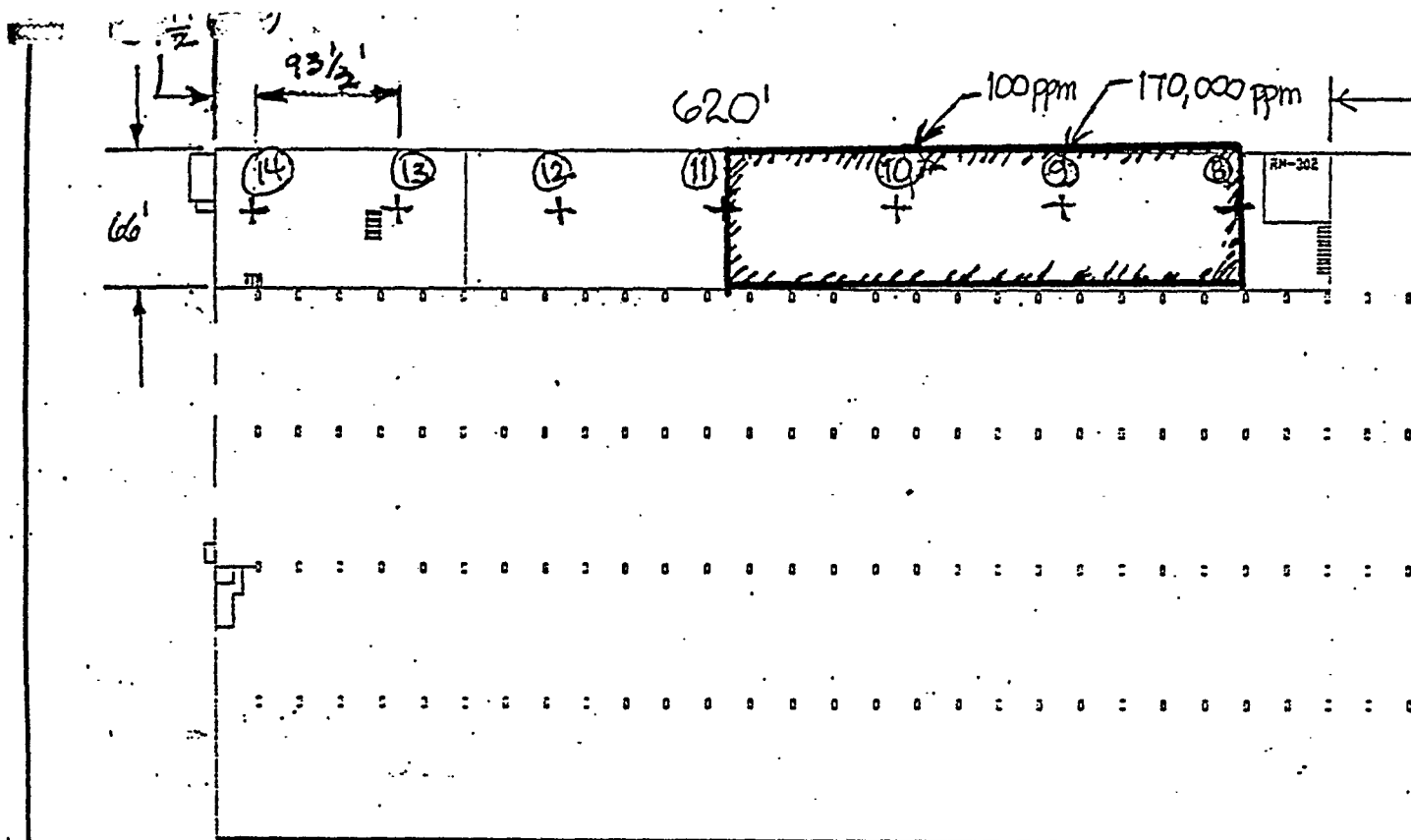


PREPARED BY: MARE ISLAND NAVAL SHIPYARD Vallejo, California Code 2481 Production Engineering	
Drawn by: E. NAVVAR LOUISE HARTUS	Inspected By: DON JOHNSON
File No. B627-1	Disk No. MI
REVISIONS BY DATE	

MARE ISLAND
BLDG. 627
FIRST FLOOR

SHEET 1 OF 7

ENCLOSURE (3)
SHEET 2 OF 3



BUILDING 627: WAREHOUSE, GENERAL
THIRD FLOOR



PCB CONTAMINATED
 AREA

NORTH

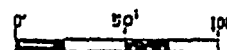
PREPARED BY:
 MARE ISLAND NAVAL SHIPYARD
 Vallejo, California
 Code 248.1 Production Engineering

Drawn by: LOUISE MARTUS
 Inspected By: DON JOHNSON

File No. B627-3 Disk No. MI

REVISIONS BY DATE

MARE ISLAND
 BLDG. 627
 THIRD FLOOR



ENCLOSURE (3)
 SHEET 3 OF 3

Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 04/05/96
Date Received: 04/09/96
Date Extracted: 04/11/96
Date Analyzed: 04/12/96
Work Order No.: 96-04-117
Method: EPA 8080A (PCBs)
Page 1 of 5

Attn: Russ Finlinson
RE: Contract No. N00244-96-D-2009

All concentrations are reported in $\mu\text{g}/\text{kg}$ (ppb).

Sample Number: 6094-0298 (01-C/01-C/map Item # 1)

<u>Analyte</u>	<u>Concentration</u>	<u>Reportable Limit</u>
Aroclor-1016	ND	1000
Aroclor-1221	ND	1000
Aroclor-1232	ND	1000
Aroclor-1242	ND	1000
Aroclor-1248	ND	1000
Aroclor-1254	ND	1000
Aroclor-1260	ND	1000
Aroclor-1262	ND	1000

Sample Number: 6094-0299 (01-C/01-C/map Item # 2)

Aroclor-1016	ND	1000
Aroclor-1221	ND	1000
Aroclor-1232	ND	1000
Aroclor-1242	ND	1000
Aroclor-1248	ND	1000
Aroclor-1254	ND	1000
Aroclor-1260	ND	1000
Aroclor-1262	ND	1000

ENCLOSURE (4)

SHEET 1 OF 6

Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 04/05/96
Date Received: 04/09/96
Date Extracted: 04/11/96
Date Analyzed: 04/12/96
Work Order No.: 96-04-117
Method: EPA 8080A (PCBs)
Page 2 of 5

Attn: Russ Finlinson
RE: Contract No. N00244-96-D-2009

All concentrations are reported in µg/kg (ppb).

Sample Number: 6094-0300 (01-C/01-C/map Item # 3)

<u>Analyte</u>	<u>Concentration</u>	<u>Reportable Limit</u>
Aroclor-1016	ND	1000
Aroclor-1221	ND	1000
Aroclor-1232	ND	1000
Aroclor-1242	ND	1000
Aroclor-1248	ND	1000
Aroclor-1254	ND	1000
Aroclor-1260	ND	1000
Aroclor-1262	ND	1000

Sample Number: 6094-0301 (01-C/01-C/map Item # 4)

Aroclor-1016	ND	1000
Aroclor-1221	ND	1000
Aroclor-1232	ND	1000
Aroclor-1242	ND	1000
Aroclor-1248	ND	1000
Aroclor-1254	ND	1000
Aroclor-1260	ND	1000
Aroclor-1262	ND	1000

ENCLOSURE (4)

SHEET 2 OF 6



Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 04/05/96
Date Received: 04/09/96
Date Extracted: 04/11/96
Date Analyzed: 04/12-13/96
Work Order No.: 96-04-117
Method: EPA 8080A (PCBs)
Page 3 of 5

Attn: Russ Finlanson
RE: Contract No. N00244-96-D-2009

All concentrations are reported in $\mu\text{g/kg}$ (ppb).

Sample Number: 6094-0302 (01-C/01-C/map Item # 5)

<u>Analyte</u>	<u>Concentration</u>	<u>Reportable Limit</u>
Aroclor-1016	ND	1000
Aroclor-1221	ND	1000
Aroclor-1232	ND	1000
Aroclor-1242	ND	1000
Aroclor-1248	ND	1000
Aroclor-1254	ND	1000
Aroclor-1260	ND	1000
Aroclor-1262	ND	1000

Sample Number: 6094-0303 (01-C/01-C/map Item # 6)

Aroclor-1016	ND	1000
Aroclor-1221	ND	1000
Aroclor-1232	ND	1000
Aroclor-1242	ND	1000
Aroclor-1248	ND	1000
Aroclor-1254	ND	1000
Aroclor-1260	ND	1000
Aroclor-1262	ND	1000

ENCLOSURE (4)

SHEET 3 OF 6

Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 04/05/96
Date Received: 04/09/96
Date Extracted: 04/11/96
Date Analyzed: 04/13/96
Work Order No.: 96-04-117
Method: EPA 8080A (PCBs)
Page 4 of 5

Attn: Russ Finlinson
RE: Contract No. N00244-96-D-2009

All concentrations are reported in $\mu\text{g/kg}$ (ppb).

Sample Number: 6094-0304 (01-C/01-C/map item # 7)

<u>Analyte</u>	<u>Concentration</u>	<u>Reportable Limit</u>
Aroclor-1016	ND	1000
Aroclor-1221	ND	1000
Aroclor-1232	ND	1000
Aroclor-1242	ND	1000
Aroclor-1248	ND	1000
Aroclor-1254	ND	1000
Aroclor-1260	ND	1000
Aroclor-1262	ND	1000

Sample Number: 6094-0305 (01-C/01-C/map item # 8)

Aroclor-1016	ND	1000
Aroclor-1221	ND	1000
Aroclor-1232	ND	1000
Aroclor-1242	ND	1000
Aroclor-1248	ND	1000
Aroclor-1254	ND	1000
Aroclor-1260	ND	1000
Aroclor-1262	ND	1000

ENCLOSURE (4)

SHEET 4 OF 6

Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 04/05/96
Date Received: 04/09/96
Date Extracted: 04/11/96
Date Analyzed: 04/12-13/96
Work Order No.: 96-04-117
Method: EPA 8080A (PCBs)
Page 5 of 5

Attn: Russ Finlinson
RE: Contract No. N00244-96-D-2009

All concentrations are reported in µg/kg (ppb).

Sample Number: 6094-0306 (01-C/01-C/map Item # 9)

<u>Analyte</u>	<u>Concentration</u>	<u>Reportable Limit</u>
Aroclor-1016	ND	1000
Aroclor-1221	ND	1000
Aroclor-1232	ND	1000
Aroclor-1242	ND	1000
Aroclor-1248	ND	1000
Aroclor-1254	ND	1000
Aroclor-1260	ND	1000
Aroclor-1262	ND	1000

Sample Number: Method Blank

Aroclor-1016	ND	100
Aroclor-1221	ND	100
Aroclor-1232	ND	100
Aroclor-1242	ND	100
Aroclor-1248	ND	100
Aroclor-1254	ND	100
Aroclor-1260	ND	100
Aroclor-1262	ND	100

Reviewed and Approved


William H. Christensen
Deliverables Manager

on 04/22/1996

ENCLOSURE (4)

ND denotes not detected at indicated reportable limit.

SHEET 5 OF 6

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

QUALITY ASSURANCE SUMMARY

Method EPA 8080A (PCBs only)

Mare Island Naval Shipyard
Page 1 of 1

Work Order No.: 96-04-117
Date Analyzed: 04/13/96

LCS/LCS Duplicate

<u>Analyte</u>	<u>LCS%REC</u>	<u>LCSD%REC</u>	<u>Control Limits</u>	<u>%RPD</u>	<u>Control Limits</u>
Aroclor-1260	87	86	50 - 135	1	0 - 25

Surrogate Recoveries (in %)

<u>Sample Number</u>	<u>S1</u>	<u>Sample Number</u>	<u>S1</u>
6094-0298	100	6094-0303	77
6094-0299	103	6094-0304	83
6094-0300	101	6094-0305	88
6094-0301	81	6094-0306	74
6094-0302	84	Method Blank	102

Surrogate Compound

S1 > Decachlorobiphenyl (DCB)

%REC
Acceptable Limits

50 - 130

Reviewed and approved: William H. Christensen on 04/22/1996

William H. Christensen
Deliverables Manager

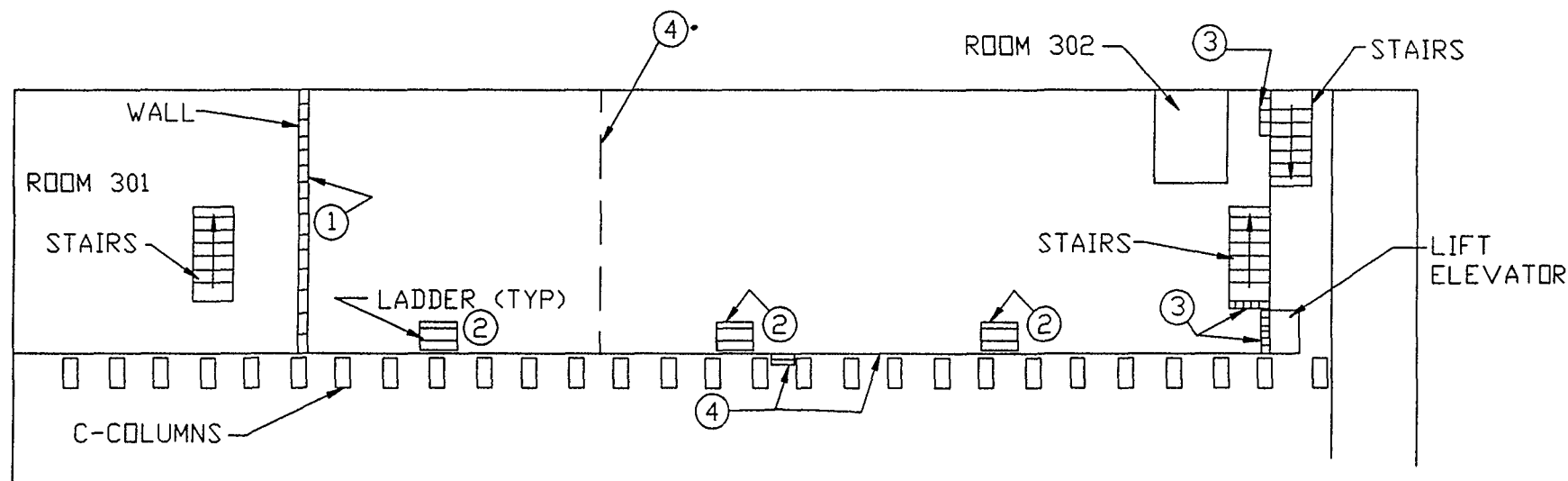
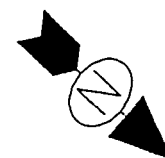
ENCLOSURE (4)

SHEET 6 OF 6

BUILDING 627

MEZZANINE-3RD FLOOR

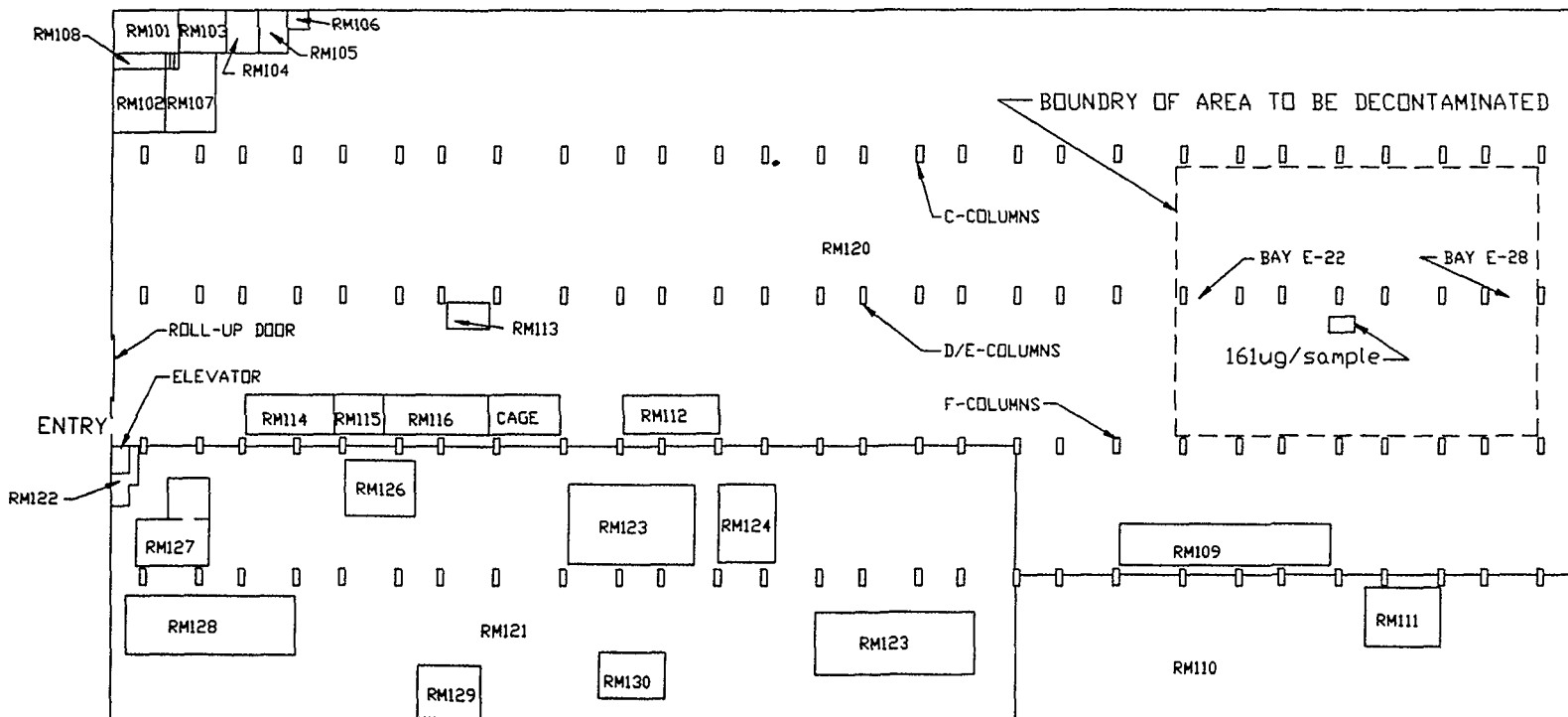
(SECOND FLOOR MEZZANINE IS BELOW)



1. THE THIRD FLOOR MEZZANINE IS BARRICADED ON THE SOUTH END AT THE EXISTING WALL. DOOR OPENINGS HAVE PLYWOOD OVER THEM. WINDOW AND RAMP AREAS HAVE WIRE MESH OVER THEM FOR SECURITY.
2. LADDERS TO THE THIRD FLOOR MEZZANINE FROM THE SECOND FLOOR MEZZANINE AT COLUMN C-9, BETWEEN COLUMNS C-11 AND C-12, AND AT COLUMN C-20 ARE BLANKED WITH PLYWOOD.
3. STAIRS AT THE NORTH END OF THE THIRD FLOOR MEZZANINE ARE SECURED AT THE EXISTING WIRE MESH CAGED GATE. THE WIRE MESH GATE AT THE SECOND FLOOR MEZZANINE AT THE NORTH END IS ALSO SECURED. THE LIFT ELEVATOR AT THE NORTH END OF THE THIRD FLOOR MEZZANINE NEAR THE STAIRS IS ALSO SECURED.
4. ON THE SECOND FLOOR MEZZANINE THE EXISTING WIRE MESH BARRICADE BETWEEN COLUMNS C-12 AND C-13 HAS ADDITIONAL PLYWOOD ADDED TO SECURE A EXISTING OPENING. A LADDER FROM THE FIRST FLOOR TO THE SECOND FLOOR MEZZANINE AT COLUMN C-16 IS SECURE WITH PLYWOOD. A OPENING IN THE RAILING NEAR COLUMN C-18 ON THE SECOND FLOOR MEZZANINE IS SECURED WITH BARRIER TAPE.

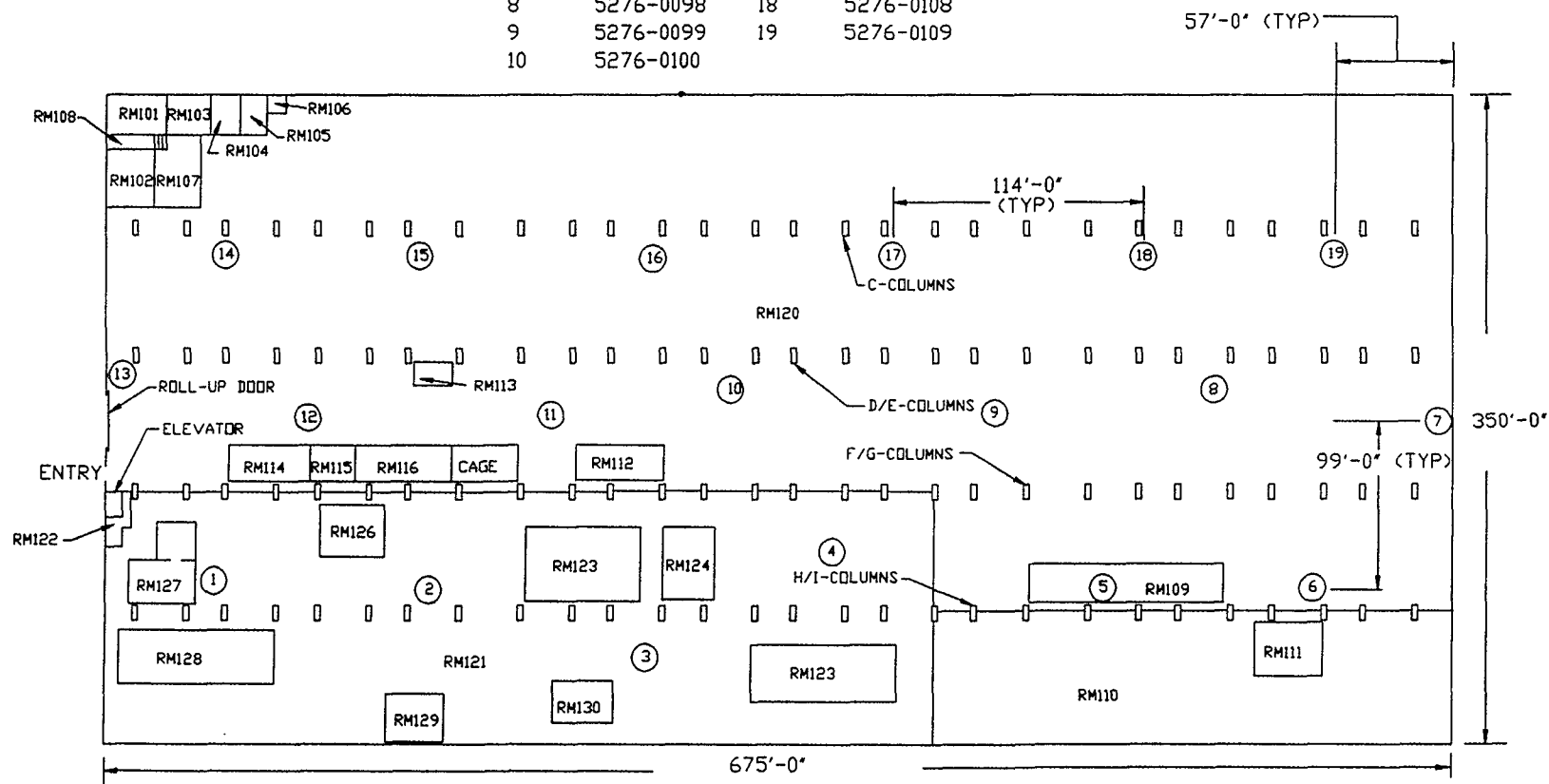


ENCL (5)



BUILDING 627 FIRST FLOOR

LDC #	SAMPLE 3	LDC #	SAMPLE 3
1	5276-0091	11	5276-0101
2	5276-0092	12	5276-0102
3	5276-0093	13	5276-0103
4	5276-0094	14	5276-0104
5	5276-0095	15	5276-0105
6	5276-0096	16	5276-0106
7	5276-0097	17	5276-0107
8	5276-0098	18	5276-0108
9	5276-0099	19	5276-0109
10	5276-0100		

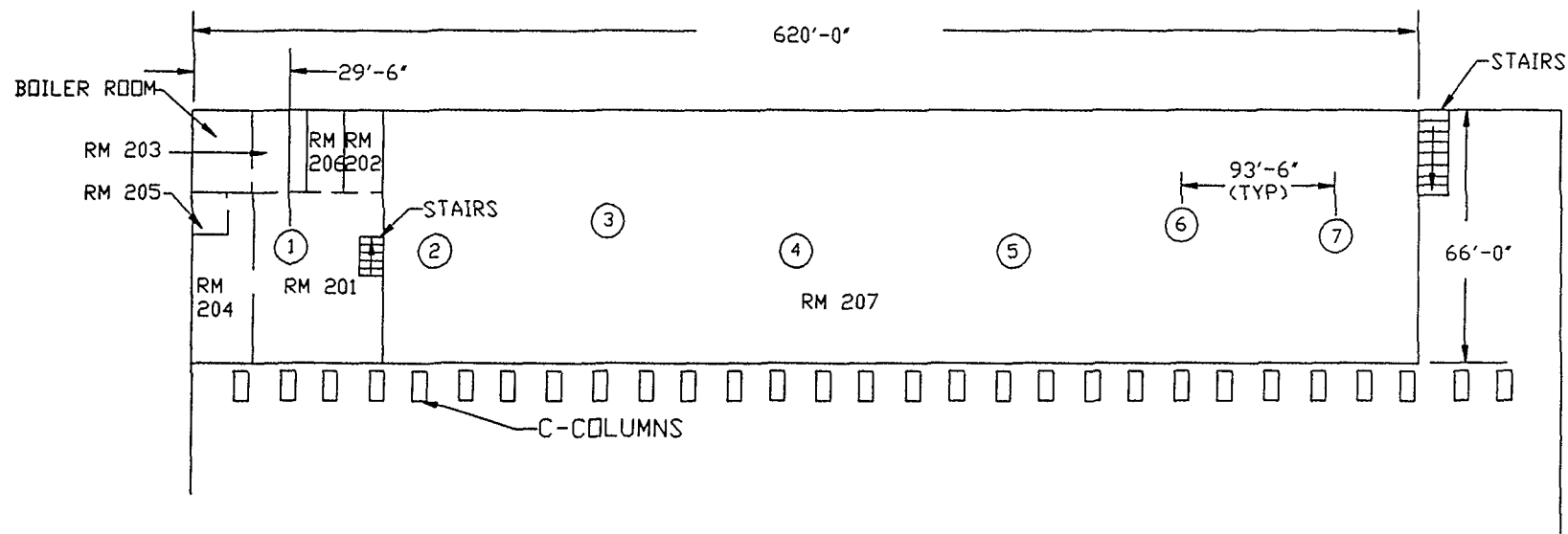


BUILDING 627 FIRST FLOOR INITIAL GRID SAMPLES



ENCL (7)
SHT 1 OF 5

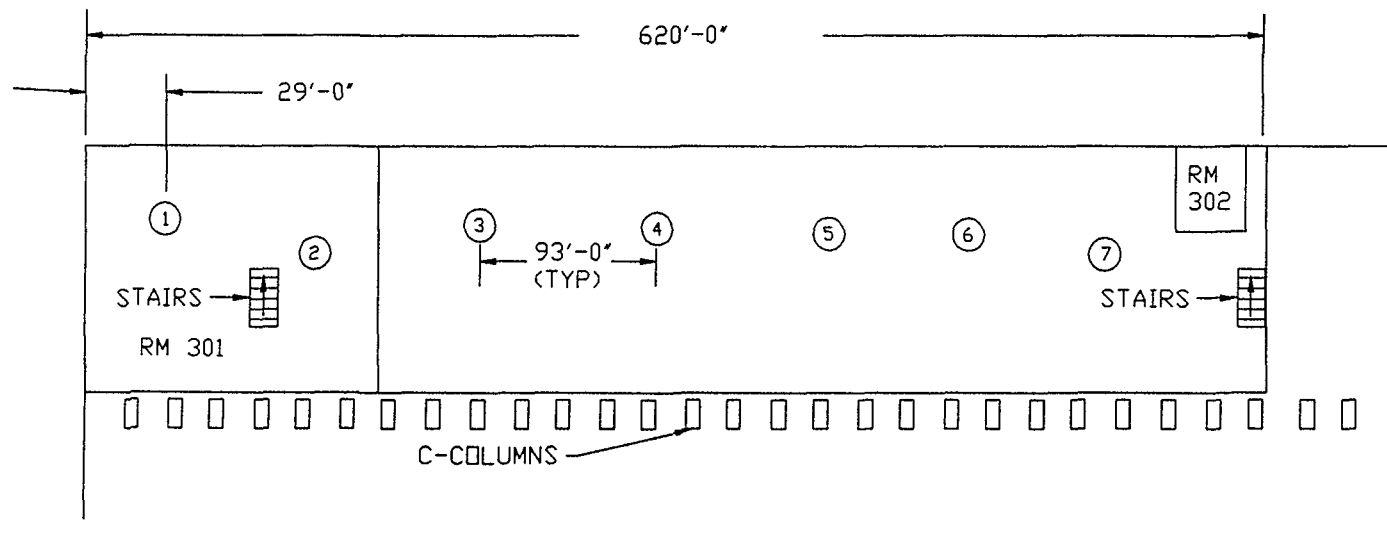
LDC #	SAMPLE #
1	5270-0064
2	5270-0065
3	5270-0066
4	5270-0067
5	5270-0068
6	5270-0069
7	5270-0070



BUILDING 627
MEZZANINE-2ND FLOOR
INITIAL GRID SAMPLES



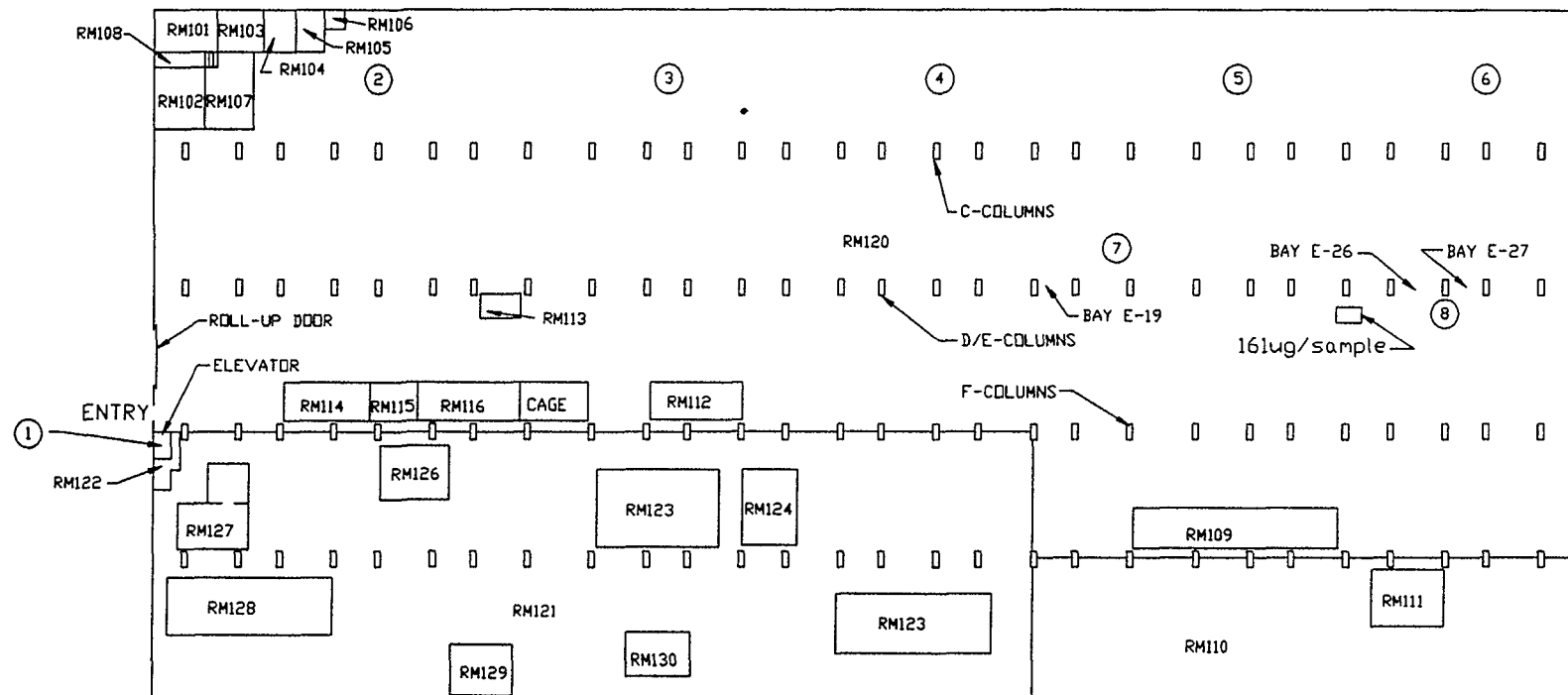
LOC #	SAMPLE #
1	5270-0077
2	5270-0076
3	5270-0075
4	5270-0074
5	5270-0073
6	5270-0072
7	5270-0071



BUILDING 627
MEZZANINE-3RD FLOOR
INITIAL GRID SAMPLES



LOC #	SAMPLE #	LOC #	SAMPLE #
1	6197-0001	5	6191-0418
2	6191-0415	6	6191-0419
3	6191-0416	7	6191-0420
4	6191-0417	8	6191-0421

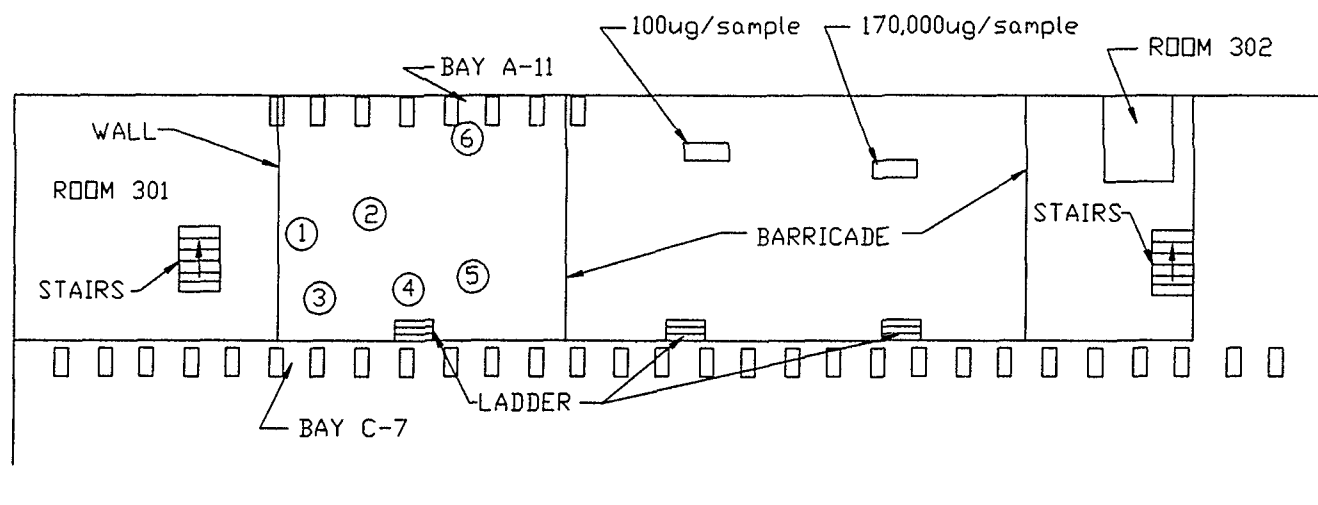


BUILDING 627 FIRST FLOOR

ADDITIONAL SAMPLES TAKEN FOR CHARACTERIZATION ON FIRST FLOOR

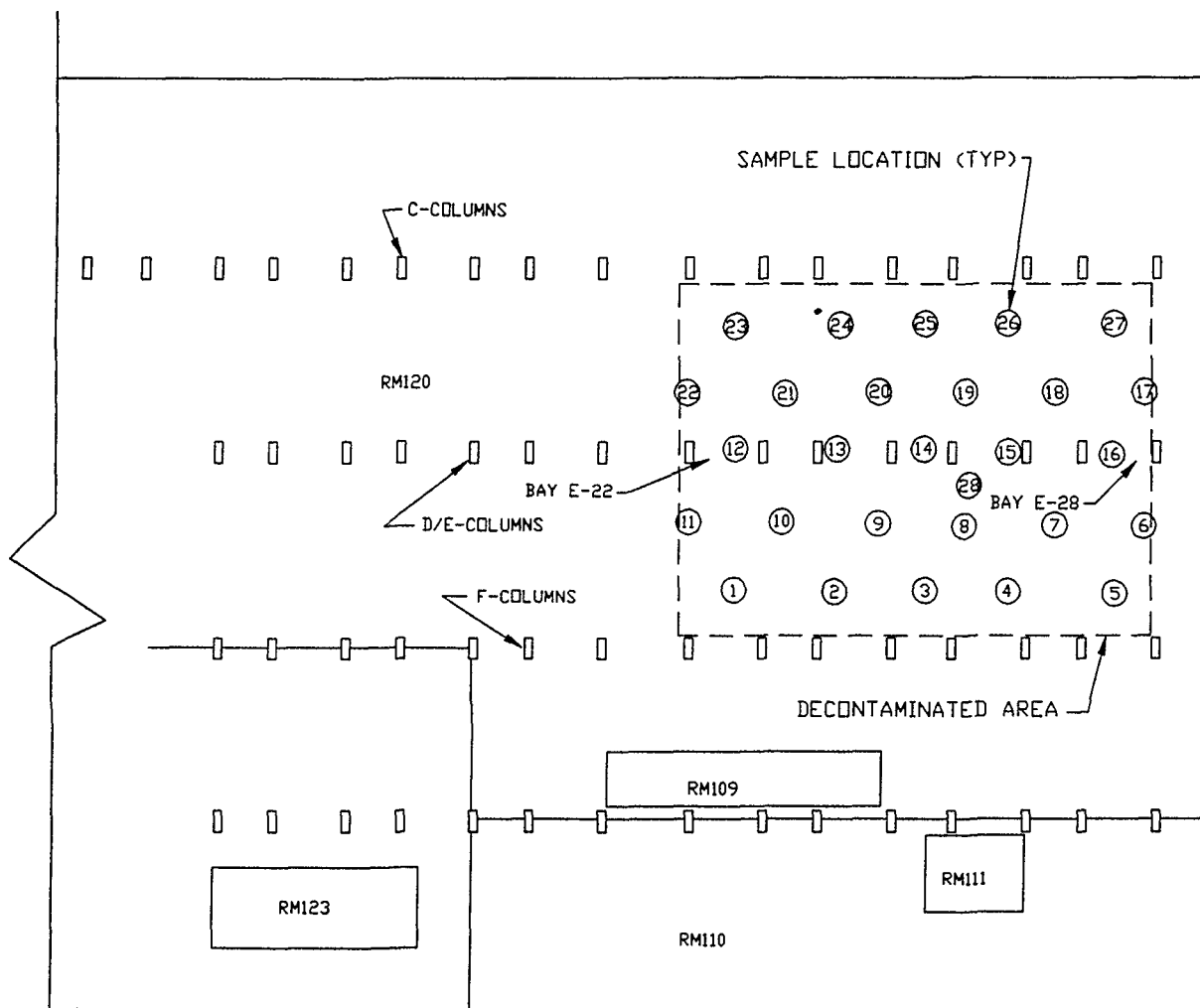


LOC#	SAMPLE #
1	6191-0517
2	6191-0516
3	6191-0515
4	6191-0519
5	6191-0518
6	6191-0514



BUILDING 627 MEZZANINE-3RD FLOOR

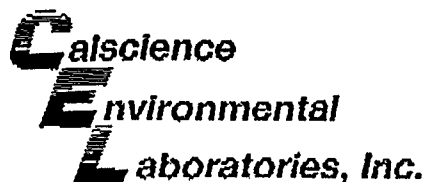
ADDITIONAL SAMPLES TAKEN FOR CHARACTERIZATION ON THIRD FLOOR



BUILDING 627 PARTIAL FIRST FLOOR

LOC #	SAMPLE #	LOC #	SAMPLE #
1	6208-0190	11	6208-0200
2	6208-0191	12	6208-0201
3	6208-0192	13	6208-0202
4	6208-0193	14	6208-0203
5	6208-0194	15	6208-0204
6	6208-0195	16	6208-0205
7	6208-0196	17	6208-0206
8	6208-0197	18	6208-0207
9	6208-0198	19	6208-0253
10	6208-0199	20	6208-0254

LOC #	SAMPLE #
21	6208-0255
22	6208-0256
23	6208-0257
24	6208-0258
25	6208-0259
26	6208-0260
27	6208-0261
28	6208-0262



ANALYTICAL REPORT

Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 10/03/95
Date Received: 10/05/95
Date Extracted: 10/05/95
Date Analyzed: 10/15/95
Work Order No.: 95-10-043
Method: EPA 8080 (PCBs)

Attn: Tammi Kratzel
RE: Contract No. N00123-92-D-4011

~~Page 2 of 7~~

All results are reported in µg/sample.

Sample Number: 5276-0093 (627/01-C/misc) *Sheet 1, Encl(7)*

<u>Analyte</u>	<u>Concentration</u>	<u>Reportable Limit</u>
Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	0.5	0.1
Aroclor-1262	ND	0.1

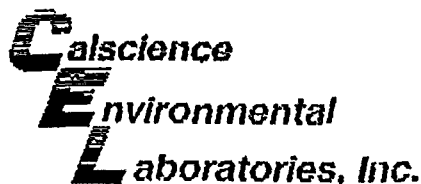
Sample Number: 5276-0094 (627/01-C/misc) *Sheet 1, Encl(7)*

Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	0.3	0.1
Aroclor-1262	ND	0.1



ENCLOSURE (9)

SHEET 2 OF 26



ANALYTICAL REPORT



Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 10/03/95
Date Received: 10/05/95
Date Extracted: 10/05/95
Date Analyzed: 10/15/95
Work Order No.: 95-10-043
Method: EPA 8080 (PCBs)

Attn: Tammi Kratzel
RE: Contract No. N00123-92-D-4011

~~Page 3 of 7~~

All results are reported in µg/sample.


Sample Number: 5276-0095 (627/01-C/misc) *Sheet 1, Encl(7)*

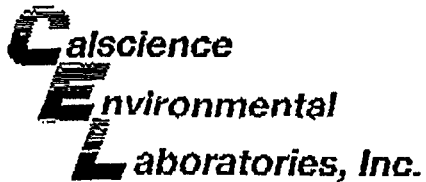
<u>Analyte</u>	<u>Concentration</u>	<u>Reportable Limit</u>
Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	0.2	0.1
Aroclor-1262	ND	0.1

Sample Number: 5276-0096 (627/01-C/misc) *Sheet 1, Encl(7)*

Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	1.3*	0.1
Aroclor-1262	ND	0.1

* Peaks identified in the chromatogram match closely (but not identically) with the profile of this PCB mixture. Degradation to the Aroclor mixture may be due to environmental weathering and/or other causes.

ENCLOSURE (9)
 SHEET 3 OF 26



ANALYTICAL REPORT



Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 10/03/95
Date Received: 10/05/95
Date Extracted: 10/05/95
Date Analyzed: 10/15/95
Work Order No.: 95-10-043
Method: EPA 8080 (PCBs)

Attn: Tammi Kratzel
RE: Contract No. N00123-92-D-4011

-Page 4 of 7-

All results are reported in µg/sample.

Sample Number: 5276-0097 (627/01-C/misc) *Sheet 1, Encl(7)*

Analyte	Concentration	Reportable Limit
Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	0.8	0.1
Aroclor-1262	ND	0.1

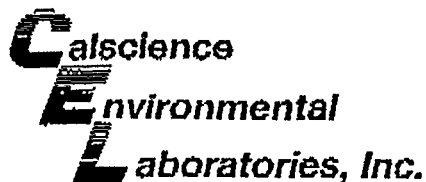
~~Sample Number: 5276-0098 (627/01-C/misc)~~

Aroclor-1016	ND	1
Aroclor-1221	ND	1
Aroclor-1232	ND	1
Aroclor-1242	ND	1
Aroclor-1248	ND	1
Aroclor-1254	ND	1
Aroclor-1260	161*	1
Aroclor-1262	ND	1

* SITE REMEDIATED BY TWD 96-1280

* Peaks identified in the chromatogram match closely (but not identically) with the profile of this PCB mixture. Degradation to the Aroclor mixture may be due to environmental weathering and/or other causes.

ENCLOSURE (9)
SHEET 4 OF 126



ANALYTICAL REPORT



Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 10/03/95
Date Received: 10/05/95
Date Extracted: 10/05/95
Date Analyzed: 10/15/95
Work Order No.: 95-10-043
Method: EPA 8080 (PCBs)

Attn: Tammi Kratzel
RE: Contract No. N00123-92-D-4011

Page 5 of 7

All results are reported in $\mu\text{g}/\text{sample}$.

Sample Number: 5276-0099 (627/01-C/misc) *Sheet 1, Encl (7)*

<u>Analyte</u>	<u>Concentration</u>	<u>Reportable Limit</u>
Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	0.6*	0.1
Aroclor-1262	ND	0.1

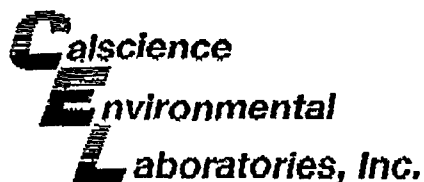
Sample Number: 5276-0100 (627/01-C/misc) *Sheet 1, Encl (7)*

Aroclor-1016	ND	1
Aroclor-1221	ND	1
Aroclor-1232	ND	1
Aroclor-1242	ND	1
Aroclor-1248	ND	1
Aroclor-1254	ND	1
Aroclor-1260	5*	1
Aroclor-1262	ND	1

* Peaks identified in the chromatogram match closely (but not identically) with the profile of this PCB mixture. Degradation to the Aroclor mixture may be due to environmental weathering and/or other causes.

ENCLOSURE (9)

SHEET 5 OF 26



ANALYTICAL REPORT



Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 10/03/95
Date Received: 10/05/95
Date Extracted: 10/05/95
Date Analyzed: 10/15/95
Work Order No.: 95-10-043
Method: EPA 8080 (PCBs)

Attn: Tammi Kratzel
RE: Contract No. N00123-92-D-4011

~~Page 6 of 7~~

All results are reported in µg/sample.

Sample Number: 5276-0101 (627/01-C/misc) *Sheet 1, Encl(7)*

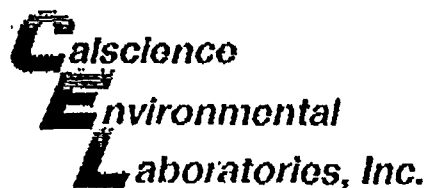
Analyte	Concentration	Reportable Limit
Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	0.8	0.1
Aroclor-1262	ND	0.1

Sample Number: 5276-0102 (627/01-C/misc) *Sheet 1, Encl(7)*

Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	0.4	0.1
Aroclor-1262	ND	0.1

ENCLOSURE (9)

SHEET 6 OF 26



ANALYTICAL REPORT



Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 07/16/96
Date Received: 07/18/96
Date Extracted: 07/18/96
Date Analyzed: 07/23/96
Work Order No.: 96-07-313
Method: EPA 8080A (PCBs)
Page 4 of 4

Attn: Russ Finlinson
RE: Contract No. N00244-96-D-2009

All concentrations are reported in $\mu\text{g/kg}$ (ppb).

Sample Number: Method Blank

Analyte	Concentration	Reportable Limit
Aroclor-1016	ND	1000
Aroclor-1221	ND	1000
Aroclor-1232	ND	1000
Aroclor-1242	ND	1000
Aroclor-1248	ND	1000
Aroclor-1254	ND	1000
Aroclor-1260	ND	1000
Aroclor-1262	ND	1000

Reviewed and Approved

William H. Christensen
Deliverables Manager

on 07/25/1996

ND denotes not detected at indicated reportable limit.

ENCLOSURE (10)
 SHEET 7 OF 13

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.



QUALITY ASSURANCE SUMMARY
Method EPA 8080A (PCBs only)

Mare Island Naval Shipyard
Page 1 of 1

Work Order No.: 96-07-313
Date Analyzed: 07/23/96

LCS/LCS Duplicate

Analyte	LCS%REC	LCSD%REC	Control Limits	%RPD	Control Limits
Aroclor-1260	72	73	50 - 135	1	0 - 25

Surrogate Recoveries (In %)

Sample Number	S1	S2
6191-0514	86	
6191-0515	82	
6191-0516	81	
6191-0517	83	
6191-0518	78	
6191-0519	309 ^{Note 1}	89
Method Blank	93	81

Surrogate Compound	%REC Acceptable Limits
S1 > Decachlorobiphenyl (DCB)	50 - 130
S2 > 2,4,5,6-Tetrachloro-m-Xylene	50 - 130

Note 1. The out of range surrogate is due to a matrix interference effect and not to an out of control analytical process. S2 (2,4,5,6-Tetrachloro-m-Xylene) falls within range, therefore no further action is necessary.

Reviewed and approved: William H. Christensen on 07/23/1996
William H. Christensen
Deliverables Manager

ENCLOSURE (10)

A SHEET 8 OF 13

MARE ISLAND NAVAL SHIPYARD
ENVIRONMENTAL LABORATORY
CODE 106L
Calif. DHS Certificate No. 2001

8/12/96

LAB NO: 96MI00515
DOC. NO: 62202568
ANALYSIS: POLYCHLORINATED BIPHENYLS
METHOD: Modified EPA 8080

Sample No.	Sample Type	Results	Arochlor	Report Limit
6208-0190	Swipe	ND		5ug/swipe
6208-0191	Swipe	ND		5ug/swipe
6208-0192	Swipe	ND		5ug/swipe
6208-0193	Swipe	ND		5ug/swipe
6208-0194	Swipe	ND		5ug/swipe
6208-0195	Swipe	ND		5ug/swipe
6208-0196	Swipe	ND		5ug/swipe
6208-0197	Swipe	ND		5ug/swipe
6208-0198	Swipe	ND		5ug/swipe
6208-0199	Swipe	ND		5ug/swipe
6208-0200	Swipe	ND		5ug/swipe
6208-0201	Swipe	ND		5ug/swipe
6208-0202	Swipe	ND		5ug/swipe
6208-0203	Swipe	ND		5ug/swipe
6208-0204	Swipe	ND		5ug/swipe
6208-0205	Swipe	ND		5ug/swipe
6208-0206	Swipe	ND		5ug/swipe
6208-0207	Swipe	ND		5ug/swipe
6208-0253	Swipe	ND		5ug/swipe
6208-0254	Swipe	ND		5ug/swipe
6208-0255	Swipe	ND		5ug/swipe
6208-0256	Swipe	ND		5ug/swipe
6208-0257	Swipe	ND		5ug/swipe
6208-0258	Swipe	ND		5ug/swipe
6208-0259	Swipe	ND		5ug/swipe
6208-0260	Swipe	ND		5ug/swipe
6208-0261	Swipe	ND		5ug/swipe
6208-0262	Swipe	ND		5ug/swipe
6208-0263	Swipe	ND - Blank		5ug/swipe

* Post Cleanup, First Floor, Bldg 627, Encl (8)

ND = None Detected at or above reporting limit.

Analyst: D. Pruitt Reviewed by: D.T. Curran Date: 8/12/96

8/15/96

QUALITY CONTROL DATA FOR NAVSEA STANDARD PROCEDURE
ANALYSIS OF SAMPLES FOR POLYCHLORINATED BIPHENYL CONTENT

LAB NUMBER	SAMPLE NUMBER	PERCENT RECOVERY**
96MI00515	6208-0190	109
	6208-0191	103
	6208-0192	106
	6208-0193	105.
	6208-0194	108
	6208-0195	98
	6208-0196	115
	6208-0197	104
	6208-0198	105
	6208-0199	102
	6208-0200	108
	6208-0201	101
	6208-0202	109
	6208-0203	98
	6208-0204	99
	6208-0205	97
	6208-0206	98
	6208-0207	104
	6208-0253	102
	6208-0254	96
	6208-0255	113
	6208-0256	103
	6208-0257	92
	6208-0258	103
	6208-0259	98
	6208-0260	110
	6208-0261	101
	6208-0262	92
	6208-0263	93

*DAILY CHECK STANDARD: 104%
METHOD BLANK: NON-DETECT



ENCLOSURE (10)
SHEET 10 OF 13

*DAILY CHECK STANDARD AROCHLOR A1260 0.10 ug/ml
**SURROGATE COMPOUND 4,4'DIBROMOOCTAFLUOROBIPHENYL
**THE ACCEPTABLE SURROGATE RECOVERY LEVELS FOR SWIPES: 80-120% OR
THE RECOVERY CAN BE >120% IF THE RESULT IS <10 ug/swipe OR >20
ug/swipe.

ACCEPTABLE NON-DETECT SURROGATE RECOVERY LEVELS FOR OILS: 75-125%.
OR THE RECOVERY CAN BE <125% IF THE RESULT IS >1 ppm OR <75% IF THE
RESULT IS <1 ppm.

D.T. Umino

DAVID T. UMINO
DIRECTOR QUALITY ASSURANCE

WP\DAVE\PCB515.QA1

Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 08/06/96
Date Received: 08/08/96
Date Extracted: 08/08/96
Date Analyzed: 08/09/96
Work Order No.: 96-08-197
Method: EPA 8080A (PCBs)
Page 1 of 1

Attn: Russ Finlinson
RE: Contract No. N00244-96-D-2009

All concentrations are reported in µg/L (ppb).

Sample Number: 6208-0271 (627/01-C/twd #96-1280 #29) *sample of holding tank, post cleanup first floor, Bldg 6i*

Analyte	Concentration	Reportable Limit
Aroclor-1016	ND	10
Aroclor-1221	ND	10
Aroclor-1232	ND	10
Aroclor-1242	ND	10
Aroclor-1248	ND	10
Aroclor-1254	ND	10
Aroclor-1260	14.7	10
Aroclor-1262	ND	10

Sample Number: Method Blank

Aroclor-1016	ND	1.00
Aroclor-1221	ND	1.00
Aroclor-1232	ND	1.00
Aroclor-1242	ND	1.00
Aroclor-1248	ND	1.00
Aroclor-1254	ND	1.00
Aroclor-1260	ND	1.00
Aroclor-1262	ND	1.00

Reviewed and Approved

William H. Christensen
William H. Christensen
Deliverables Manager

on 8/13/1996

ND denotes not detected at indicated reportable limit.

ENCLOSURE (10)
△ SHEET 12 OF 13

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

QUALITY ASSURANCE SUMMARY
Method EPA 8080A (PCBs only)

Mare Island Naval Shipyard
Page 1 of 1

Work Order No.:
Date Analyzed:

96-08-197
08/09/96

LCS/LCS Duplicate

Analyte	LCS%REC	LCSD%REC	Control Limits	%RPD	Control Limits
Aroclor-1260	99	87	50 - 135	12	0 - 25

Surrogate Recoveries (In %)

Sample Number	S1	S2
6208-0271	20 ^{Note 1}	44 ^{Note 1}
Method Blank	92	89

Surrogate Compound	%REC Acceptable Limits
S1 > Decachlorobiphenyl (DCB)	50 - 130
S2 > 2,4,5,6-Tetrachloro-m-Xylene	50 - 130

Note 1. The surrogate recovery was out of control due to a matrix interference effect. The batch method blank surrogate was in control and, hence, the associated sample data was reported with no further corrective action required.

Reviewed and approved: William H. Christensen on 08/13/1996
William H. Christensen
Deliverables Manager

ENCLOSURE (10)
SHEET 13 OF 13

Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 10/03/95
Date Received: 10/05/95
Date Extracted: 10/05/95
Date Analyzed: 10/15/95
Work Order No.: 95-10-043
Method: EPA 8080 (PCBs)

Attn: Tammi Kratzel
RE: Contract No. N00123-92-D-4011

~~Page 7 of 7~~

All results are reported in µg/sample.

Sample Number: 5276-0103 (627/01-C/misc) *Sheet 1, Encl(7)*

<u>Analyte</u>	<u>Concentration</u>	<u>Reportable Limit</u>
Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	0.4	0.1
Aroclor-1262	ND	0.1

Sample Number: Method Blank

Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	ND	0.1
Aroclor-1262	ND	0.1

Reviewed and Approved

William H. Christensen
William H. Christensen
Deliverables Manager

on 10/19/1995

ND denotes not detected at indicated reportable limit.



ENCLOSURE (9)

SHEET 7 OF 26

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 10/03/95
Date Received: 10/05/95
Date Extracted: 10/05/95
Date Analyzed: 10/15/95
Work Order No.: 95-10-043
Method: EPA 8080 (PCBs)

Attn: Tammi Kratzel
RE: Contract No. N00123-92-D-4011

~~Page 1 of 4~~

All results are reported in µg/sample.

Sample Number: 5276-0104 (627/01-C/misc) *Sheet 1, Encl(7)*

<u>Analyte</u>	<u>Concentration</u>	<u>Reportable Limit</u>
Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	0.4	0.1
Aroclor-1262	ND	0.1

Sample Number: 5276-0105 (627/01-C/misc) *Sheet 1, Encl(7)*

Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	0.7	0.1
Aroclor-1262	ND	0.1



ENCLOSURE (9)

SHEET 8 OF 26

Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 10/03/95
Date Received: 10/05/95
Date Extracted: 10/05/95
Date Analyzed: 10/15/95
Work Order No.: 95-10-043
Method: EPA 8080 (PCBs)

Attn: Tammi Kratzel
RE: Contract No. N00123-92-D-4011

~~Page 2 of 4~~

All results are reported in µg/sample.

Sample Number: 5276-0106 (627/01-C/misc) *Sheet 1, Encl(7)*

<u>Analyte</u>	<u>Concentration</u>	<u>Reportable Limit</u>
Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	1.3	0.1
Aroclor-1262	ND	0.1

Sample Number: 5276-0107 (627/01-C/misc) *Sheet 1, Encl(7)*

Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	0.6	0.1
Aroclor-1262	ND	0.1

ENCLOSURE (9)
△ SHEET 9 OF 26

Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 10/03/95
Date Received: 10/05/95
Date Extracted: 10/05/95
Date Analyzed: 10/15/95
Work Order No.: 95-10-043
Method: EPA 8080 (PCBs)

Attn: Tammi Kratzel
RE: Contract No. N00123-92-D-4011

~~Page 3 of 4~~


All results are reported in µg/sample.

Sample Number: 5276-0108 (627/01-C/misc) *Sheet 1, Encl(7)*

<u>Analyte</u>	<u>Concentration</u>	<u>Reportable Limit</u>
Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	0.5	0.1
Aroclor-1262	ND	0.1

Sample Number: 5276-0109 (627/01-C/misc) *Sheet 1, Encl(7)*

Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	0.8	0.1
Aroclor-1262	ND	0.1

ENCLOSURE (9)
 SHEET 10 OF 26

Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 10/03/95
Date Received: 10/05/95
Date Extracted: 10/05/95
Date Analyzed: 10/15/95
Work Order No.: 95-10-043
Method: EPA 8080 (PCBs)

Attn: Tammi Kratzel
RE: Contract No. N00123-92-D-4011

~~Page 4 of 4~~

All results are reported in µg/sample.

Sample Number: 5276-0110 (627/01-C/misc) *Blank*

<u>Analyte</u>	<u>Concentration</u>	<u>Reportable Limit</u>
Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	ND	0.1
Aroclor-1262	ND	0.1

Sample Number: Method Blank

Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	ND	0.1
Aroclor-1260	ND	0.1
Aroclor-1262	ND	0.1

Reviewed and Approved

William H. Christensen
William H. Christensen
Deliverables Manager

on 10/19/1995

ND denotes not detected at indicated reportable limit.

ENCLOSURE (3)
A SHEET 11 OF 26

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

(9)

52771420

Anlab

ANALYTICAL LABORATORY

1910 'S' Street ♦ Sacramento ♦ CA 95814 (916) 447-2946

10/18/95

-Page#: 1 of 9-

Mare Island Naval Shipyard
695 Walnut Avenue, Suite 5100
Mare Island, CA 94592-5100
Attn: Robert Yee

SAMPLE DESCRIPTION: 5270-0064 627/01-C/MISC COL B-2 2ND FLR, sheet 2, Encl(7)

DATE COLLECTED: 10/04/95
TIME COLLECTED: 08:40

ANLAB BATCH#: 10061502
ANLAB ID#: AE21233

CLIENT CODE: 648
DATE REC'D: 10/06/95
TIME REC'D: 14:57

DATE EXTRACTED: 10/12/95

DATE ANALYZED: 10/17/95

ANALYSIS	COMPONENT	RESULT	UNITS	MDL
PCB's EPA 8080 (soil)	PCB 1016	ND	mg/kg (ppm)	0.23
	PCB 1221	ND	mg/kg (ppm)	0.23
	PCB 1232	ND	mg/kg (ppm)	0.23
	PCB 1242	ND	mg/kg (ppm)	0.23
	PCB 1248	ND	mg/kg (ppm)	0.23
	PCB 1254	0.46	mg/kg (ppm)	0.23
	PCB 1260	ND	mg/kg (ppm)	0.23

ND = Not Detected

Report Approved By:
Anlab ELAP #: 1468

Patty Burkman

ENCLOSURE (9)



SHEET 12 OF 26

This report is applicable only to the sample received by the laboratory. The liability of the laboratory is limited to the amount paid for this report. This report is for the exclusive use of the client to whom it is addressed and upon the condition that the client assumes all liability for the further distribution of the report or its contents.

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CHARGE 66976/67/67

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10/18/95

Page#: 2 of 9

Mare Island Naval Shipyard
695 Walnut Avenue, Suite 5100
Mare Island, CA 94592-5100
Attn: Robert Yee

SAMPLE DESCRIPTION: 5270-0065 627/01-C/MISC COL B-7 2ND FLR, *Sheet 2, Encl(7)*

DATE COLLECTED: 10/04/95
TIME COLLECTED: 09:00

ANLAB BATCH#: 10061502
ANLAB ID#: AE21234

CLIENT CODE: 648
DATE REC'D: 10/06/95
TIME REC'D: 14:57

DATE EXTRACTED: 10/12/95


DATE ANALYZED: 10/17/95

ANALYSIS	COMPONENT	RESULT	UNITS	MDL (*)
PCB's EPA 8080 (soil)	PCB 1016	ND	mg/kg (ppm)	4.4
	PCB 1221	ND	mg/kg (ppm)	4.4
	PCB 1232	ND	mg/kg (ppm)	4.4
	PCB 1242	ND	mg/kg (ppm)	4.4
	PCB 1248	ND	mg/kg (ppm)	4.4
	PCB 1254	8.8	mg/kg (ppm)	4.4
	PCB 1260	ND	mg/kg (ppm)	4.4

ND = Not Detected

* Increased detection limit due to a high level of analyte present in the sample.

Report Approved By: *P. Buckner*
Anlab ELAP #: 1468

ENCLOSURE (9)
 SHEET 13 OF 26

This report is applicable only to the sample received by the laboratory. The liability of the laboratory is limited to the amount paid for this report. This report is for the exclusive use of the client to whom it is addressed and upon the condition that the client assumes all liability for the further distribution of the report or its contents.

ANALYSIS

COMPONENT

RESULT

UNITS

MDL

Anlab

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10/18/95

Page#: 4 of 9

Mare Island Naval Shipyard
695 Walnut Avenue, Suite 5100
Mare Island, CA 94592-5100
Attn: Robert Yee

SAMPLE DESCRIPTION: 5270-0067 627/01-C/MISC COL B-14 2ND FLR, Sheet 2, Encl(?)

DATE COLLECTED: 10/04/95
TIME COLLECTED: 09:35

ANLAB BATCH#: 10061502
ANLAB ID#: AE21236

CLIENT CODE: 648
DATE REC'D: 10/06/95
TIME REC'D: 14:57

DATE EXTRACTED: 10/12/95

DATE ANALYZED: 10/17/95

ANALYSIS	COMPONENT	RESULT	UNITS	MDL
PCB's EPA 8080 (soil)	PCB 1016	ND	mg/kg {ppm}	0.50
	PCB 1221	ND	mg/kg {ppm}	0.50
	PCB 1232	ND	mg/kg {ppm}	0.50
	PCB 1242	ND	mg/kg {ppm}	0.50
	PCB 1248	ND	mg/kg {ppm}	0.50
	PCB 1254	3.2	mg/kg {ppm}	0.50
	PCB 1260	ND	mg/kg {ppm}	0.50

ND = Not Detected

Report Approved By: P. Bucknell
Anlab ELAP #: 1468

ENCLOSURE (4)



SHEET 15 OF 26

This report is applicable only to the sample received by the laboratory. The liability of the laboratory is limited to the amount paid for this report. This report is for the exclusive use of the client to whom it is addressed and upon the condition that the client assumes all liability for the further distribution of the report or its contents.

ON 3041

Q77111

T750/66016

CH:QT C66T/6T/QT

10/18/95

-Page#: 5 of 9-

Mare Island Naval Shipyard
695 Walnut Avenue, Suite 5100
Mare Island, CA 94592-5100
Attn: Robert Yee

SAMPLE DESCRIPTION: 5270-0068 627/01-C/MISC COL B-18 2ND FLR, *Sheet 2, Encl(7)*

DATE COLLECTED: 10/04/95
TIME COLLECTED: 09:55

ANLAB BATCH#: 10061502
ANLAB ID#: AE21237

CLIENT CODE: 648
DATE REC'D: 10/06/95
TIME REC'D: 14:57

DATE EXTRACTED: 10/12/95

DATE ANALYZED: 10/17/95

ANALYSIS	COMPONENT	RESULT	UNITS	MDL
PCB's EPA 8080 (soil)	PCB 1016	ND	mg/kg (ppm)	0.32
	PCB 1221	ND	mg/kg (ppm)	0.32
	PCB 1232	ND	mg/kg (ppm)	0.32
	PCB 1242	ND	mg/kg (ppm)	0.32
	PCB 1248	ND	mg/kg (ppm)	0.32
	PCB 1254	2.5	mg/kg (ppm)	0.32
	PCB 1260	ND	mg/kg (ppm)	0.32

ND - Not Detected

Report Approved By: *P. Bucknell*
Anlab ELAP #: 1468



ENCLOSURE (9)

SHEET 16 OF 26

This report is applicable only to the sample received by the laboratory. The liability of the laboratory is limited to the amount paid for this report. This report is for the exclusive use of the client to whom it is addressed and upon the condition that the client assumes all liability for the further distribution of the report or its contents.

/ 0 1000

ANLAB

TZFR/44976

SB:9T G661/61/AT

Anlab

ANALYTICAL LABORATORY

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10/18/95

Page#: 6 of 9

Mare Island Naval Shipyard
695 Walnut Avenue, Suite 5100
Mare Island, CA 94592-5100
Attn: Robert Yee

SAMPLE DESCRIPTION: 5270-0069 627/01-C/MISC COL A-22 2ND FLR, Sheet 2, Encl(7)

DATE COLLECTED: 10/04/95
TIME COLLECTED: 10:12

ANLAB BATCH#: 10061502
ANLAB ID#: AE21238

CLIENT CODE: 648
DATE REC'D: 10/06/95
TIME REC'D: 14:57

DATE EXTRACTED: 10/12/95


DATE ANALYZED: 10/17/95

ANALYSIS	COMPONENT	RESULT	UNITS	MDL
PCB's EPA 8080 (soil)	PCB 1016	ND	mg/kg (ppm)	0.27
	PCB 1221	ND	mg/kg (ppm)	0.27
	PCB 1232	ND	mg/kg (ppm)	0.27
	PCB 1242	ND	mg/kg (ppm)	0.27
	PCB 1248	ND	mg/kg (ppm)	0.27
	PCB 1254	1.4	mg/kg (ppm)	0.27
	PCB 1260	ND	mg/kg (ppm)	0.27

ND - Not Detected

Report Approved By: ABurnell
Anlab ELAP #: 1468

ENCLOSURE (9)

 SHEET 17 OF 26

This report is applicable only to the sample received by the laboratory. The liability of the laboratory is limited to the amount paid for this report. This report is for the exclusive use of the client to whom it is addressed and upon the condition that the client assumes all liability for the further distribution of the report or its contents.

RR 7044

ANLAB

10/19/1995 16:43 9164478321

Anlab

ANALYTICAL LABORATORY

1910 'S' Street ♦ Sacramento ♦ CA 95814 (916) 447-2948

10/18/95

Page# 7 of 9

Mare Island Naval Shipyard
695 Walnut Avenue, Suite 5100
Mare Island, CA 94592-5100
Attn: Robert Yee

SAMPLE DESCRIPTION: 5270-0070 627/D1-C/MISC COL A-25 2ND FLR, Sheet 2, Encl(7)

DATE COLLECTED: 10/04/95
TIME COLLECTED: 10:40

ANLAB BATCH#: 10061502
ANLAB ID#: AE21239

CLIENT CODE: 648
DATE REC'D: 10/06/95
TIME REC'D: 14:57

DATE EXTRACTED: 10/12/95

DATE ANALYZED: 10/17/95

ANALYSIS	COMPONENT	RESULT	UNITS	MDL
PCB's EPA 8080 (soil)	PCB 1016	ND	mg/kg (ppm)	0.48
	PCB 1221	ND	mg/kg (ppm)	0.48
	PCB 1232	ND	mg/kg (ppm)	0.48
	PCB 1242	ND	mg/kg (ppm)	0.48
	PCB 1248	ND	mg/kg (ppm)	0.48
	PCB 1254	2.4	mg/kg (ppm)	0.48
	PCB 1260	ND	mg/kg (ppm)	0.48

ND = Not Detected

Report Approved By: *[Signature]*
Anlab ELAP #: 1468



ENCLOSURE (9)

SHEET 18 OF 26

This report is applicable only to the sample received by the laboratory. The liability of the laboratory is limited to the amount paid for this report. This report is for the exclusive use of the client to whom it is addressed and upon the condition that the client assumes all liability for the further distribution of the report or its contents.

CA 2000

ANLAB

1728/66916

86:91 6661/61/01

Anlab

ANALYTICAL LABORATORY

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10/18/95

Page# 8 of 9

Mare Island Naval Shipyard
695 Walnut Avenue, Suite 5100
Mare Island, CA 94592-5100
Attn: Robert Yee

SAMPLE DESCRIPTION: 5270-0071 627/01-C/MISC COL B-24 3RD FLR, sheet 3, Encl(7)

DATE COLLECTED: 10/04/95
TIME COLLECTED: 10:55

ANLAB BATCH#: 10061502
ANLAB ID#: AE21240

CLIENT CODE: 648
DATE REC'D: 10/06/95
TIME REC'D: 14:57

DATE EXTRACTED: 10/12/95


DATE ANALYZED: 10/17/95

ANALYSIS	COMPONENT	RESULT	UNITS	MDL
PCB's EPA 8080 (soil)	PCB 1016	ND	mg/kg (ppm)	0.45
	PCB 1221	ND	mg/kg (ppm)	0.45
	PCB 1232	ND	mg/kg (ppm)	0.45
	PCB 1242	ND	mg/kg (ppm)	0.45
	PCB 1248	ND	mg/kg (ppm)	0.45
	PCB 1254	2.0	mg/kg (ppm)	0.45
	PCB 1260	ND	mg/kg (ppm)	0.45

ND = Not Detected

Report Approved By: *P. Bucknell*
Anlab ELAP #: 1468

ENCLOSURE (3)

 SHEET 19 OF 26

TWD

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ANALYTICAL LABORATORY

1910 "B" Street ♦ Sacramento ♦ CA 95814 (916) 447-2946

10/18/95

Page#: 9 of 9

Mare Island Naval Shipyard
695 Walnut Avenue, Suite 5100
Mare Island, CA 94592-5100
Attn: Robert Yee

Sheet, 3, Encl (7)

SAMPLE DESCRIPTION: 5270-0072 627/01-C/MISC COL A-19 3RD FLR

DATE COLLECTED: 10/04/95
TIME COLLECTED: 13:55

ANLAB BATCH#: 10061502
ANLAB ID#: AE21241

CLIENT CODE: 648
DATE REC'D: 10/06/95
TIME REC'D: 14:57

DATE EXTRACTED: 10/12/95

DATE ANALYZED: 10/17/95

ANALYSIS	COMPONENT	RESULT	UNITS	MDL (*)
PCB's EPA 8080 (soil)	PCB 1016	ND	mg/kg (ppm)	29000
	PCB 1221	ND	mg/kg (ppm)	29000
	PCB 1232	ND	mg/kg (ppm)	29000
	PCB 1242	ND	mg/kg (ppm)	29000
	PCB 1248	ND	mg/kg (ppm)	29000
	PCB 1254	170000	mg/kg (ppm)	29000
	PCB 1260	ND	mg/kg (ppm)	29000

* IN BARRICADED PORTION OF 3RD FLOOR
MEZZANINE

ND = Not Detected

* Increased detection limit due to a high level of analyte present in the sample.

Report Approved By: R. Bucknell
Anlab ELAP #: 1468

ENCLOSURE (9)

△ SHEET 20 OF 26

This report is applicable only to the sample received by the laboratory. The liability of the laboratory is limited to the amount paid for this report. This report is for the exclusive use of the client to whom it is addressed and upon the condition that the client assumes all liability for the further distribution of the report or its contents.

TT 10-11

ANLAB

12/28/95

10/19/95

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Anlab

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10/19/95

Page# 1 of 6

Mare Island Naval Shipyard
695 Walnut Avenue, Suite 5100
Mare Island, CA 94592-5100
Attn: Robert Yee

Sheet 3, Encl (7)

SAMPLE DESCRIPTION: 5270-0073 627/01-C/MISC COL A-16 3RD FLR

DATE COLLECTED: 10/04/95

TIME COLLECTED: 14:15

ANLAB BATCH#: 10061505

ANLAB ID#: AE21242

CLIENT CODE: 648

DATE REC'D: 10/06/95

TIME REC'D: 15:03

DATE EXTRACTED: 10/12/95

DATE ANALYZED: 10/17/95

ANALYSIS	COMPONENT	RESULT	UNITS	MDL*
PCB's EPA 8080 (soil)	PCB 1016	ND	mg/kg (ppm)	20
	PCB 1221	ND	mg/kg (ppm)	20
	PCB 1232	ND	mg/kg (ppm)	20
	PCB 1242	ND	mg/kg (ppm)	20
	PCB 1248	ND	mg/kg (ppm)	20
	PCB 1254	100	mg/kg (ppm)	20
	PCB 1260	ND	mg/kg (ppm)	20

*

IN HARRICADED PORTION OF 3RD FLOOR MEZZANINE

* Increased detection limit due to a high level of analyte present in the sample.

ND - Not Detected

Report Approved By: P. Bunker
Anlab ELAP #: 1468

ENCLOSURE (9)

A SHEET 21 OF 26

Anlab

ANALYTICAL LABORATORY

1910 "B" Street ♦ Sacramento ♦ CA 95814 (916) 447-2948

10/19/95

Page#: 2 of 6

Mare Island Naval Shipyard
695 Walnut Avenue, Suite 5100
Mare Island, CA 94592-5100
Attn: Robert Yee

SAMPLE DESCRIPTION: 5270-0074 627/01-C/MISC COL A-12 3RD FLR, sheet 3, End(7)

DATE COLLECTED: 10/04/95
TIME COLLECTED: 14:30

ANLAB BATCH#: 10061505
ANLAB ID#: AE21243

CLIENT CODE: 648
DATE REC'D: 10/06/95
TIME REC'D: 15:03

DATE EXTRACTED: 10/12/95

DATE ANALYZED: 10/17/95

ANALYSIS	COMPONENT	RESULT	UNITS	MDL*
PCB's EPA 8080 (soil)	PCB 1016	ND	mg/kg (ppm)	4.8
	PCB 1221	ND	mg/kg (ppm)	4.8
	PCB 1232	ND	mg/kg (ppm)	4.8
	PCB 1242	ND	mg/kg (ppm)	4.8
	PCB 1248	ND	mg/kg (ppm)	4.8
	PCB 1254	25	mg/kg (ppm)	4.8
	PCB 1260	ND	mg/kg (ppm)	4.8

* Increased detection limit due to a high level of analyte present in the sample.

ND = Not Detected

Report Approved By: P. Bunker
Anlab ELAP #: 1468



ENCLOSURE (9)

SHEET 22 OF 26

10/19/95

Page#: 3 of 6

Mare Island Naval Shipyard
695 Walnut Avenue, Suite 5100
Mare Island, CA 94592-5100
Attn: Robert Yee

SAMPLE DESCRIPTION: 5270-0075 627/01-C/MISC COL A-8 3RD FLR *Sheet, 3, Encl(7)*

DATE COLLECTED: 10/04/95
TIME COLLECTED: 14:42

ANLAB BATCH#: 10061505
ANLAB ID#: AE21244

CLIENT CODE: 648
DATE REC'D: 10/06/95
TIME REC'D: 15:03

DATE EXTRACTED: 10/12/95

DATE ANALYZED: 10/17/95

ANALYSIS	COMPONENT	RESULT	UNITS	MDL*
PCB's EPA 8080 (soil)	PCB 1016	ND	mg/kg (ppm)	0.95
	PCB 1221	ND	mg/kg (ppm)	0.95
	PCB 1232	ND	mg/kg (ppm)	0.95
	PCB 1242	ND	mg/kg (ppm)	0.95
	PCB 1248	ND	mg/kg (ppm)	0.95
	PCB 1254	5.7	mg/kg (ppm)	0.95
	PCB 1260	ND	mg/kg (ppm)	0.95

* Increased detection limit due to a high level of analyte present in the sample.

ND = Not Detected

Report Approved By: *P. Bucknell*
Anlab ELAP #: 1468

ENCLOSURE (9)
SHEET 23 OF 26

10/19/95

Page#: 4 of 6

Mare Island Naval Shipyard
695 Walnut Avenue, Suite 5100
Mare Island, CA 94592-5100
Attn: Robert Yee

SAMPLE DESCRIPTION: 5270-0076 627/01-C/MISC COL B-4 3RD FLR, Sheet 3, Encl(?)

DATE COLLECTED: 10/04/95
TIME COLLECTED: 14:50

ANLAB BATCH#: 10061505
ANLAB ID#: AE21245

CLIENT CODE: 648
DATE REC'D: 10/06/95
TIME REC'D: 15:03

DATE EXTRACTED: 10/12/95

DATE ANALYZED: 10/17/95

ANALYSIS	COMPONENT	RESULT	UNITS	MDL*
PCB's EPA 8080 (soil)	PCB 1016	ND	mg/kg (ppm)	3.3
	PCB 1221	ND	mg/kg (ppm)	3.3
	PCB 1232	ND	mg/kg (ppm)	3.3
	PCB 1242	ND	mg/kg (ppm)	3.3
	PCB 1248	ND	mg/kg (ppm)	3.3
	PCB 1254	12	mg/kg (ppm)	3.3
	PCB 1260	ND	mg/kg (ppm)	3.3

* Increased detection limit due to a high level of analyte present in the sample.

ND = Not Detected

Report Approved By: P. Bicknell
Anlab ELAP #: 1468

ENCLOSURE (9)
A SHEET 24 OF 26

Anlab

ANALYTICAL LABORATORY

1910 "B" Street • Sacramento • CA 95814 (916) 447-2948

10/19/95

Page#: 5 of 6

Mare Island Naval Shipyard
695 Walnut Avenue, Suite 5100
Mare Island, CA 94592-5100
Attn: Robert Yee

SAMPLE DESCRIPTION: 5270-0077 627/01-C/MISC COL A-1 3RD FLR, *Sheet 3, Encl (7)*

DATE COLLECTED: 10/04/95
TIME COLLECTED: 14:57

ANLAB BATCH#: 10061505
ANLAB ID#: AE21246

CLIENT CODE: 648
DATE REC'D: 10/06/95
TIME REC'D: 15:03

DATE EXTRACTED: 10/12/95


DATE ANALYZED: 10/17/95

ANALYSIS	COMPONENT	RESULT	UNITS	MDL*
PCB's EPA 8080 (soil)	PCB 1016	ND	mg/kg (ppm)	0.79
	PCB 1221	ND	mg/kg (ppm)	0.79
	PCB 1232	ND	mg/kg (ppm)	0.79
	PCB 1242	ND	mg/kg (ppm)	0.79
	PCB 1248	ND	mg/kg (ppm)	0.79
	PCB 1254	4.5	mg/kg (ppm)	0.79
	PCB 1260	ND	mg/kg (ppm)	0.79

* Increased detection limit due to a high level of analyte present in the sample.

ND = Not Detected

Report Approved By: *P. Buckall*
Anlab ELAP #: 1468

ENCLOSURE (9)
 SHEET 25 OF 26

10/19/95

-Page#: 6 of 6-

Mare Island Naval Shipyard
695 Walnut Avenue, Suite 5100
Mare Island, CA 94592-5100
Attn: Robert Yee

SAMPLE DESCRIPTION: 5270-0078 627/01-C/MISC COL DUPLICATE, 5270-0077

DATE COLLECTED: 10/04/95
TIME COLLECTED: 15:05

ANLAB BATCH#: 10061505
ANLAB ID#: AE21247

CLIENT CODE: 648
DATE REC'D: 10/06/95
TIME REC'D: 15:03

DATE EXTRACTED: 10/12/95

DATE ANALYZED: 10/17/95

ANALYSIS	COMPONENT	RESULT	UNITS	MDL*
PCB's EPA 8080 (soil)	PCB 1016	ND	mg/kg (ppm)	3.3
	PCB 1221	ND	mg/kg (ppm)	3.3
	PCB 1232	ND	mg/kg (ppm)	3.3
	PCB 1242	ND	mg/kg (ppm)	3.3
	PCB 1248	ND	mg/kg (ppm)	3.3
	PCB 1254	5.8	mg/kg (ppm)	3.3
	PCB 1260	ND	mg/kg (ppm)	3.3

* Increased detection limit due to a high level of analyte present in the sample.

ND = Not Detected

Report Approved By: P. Buckner
Anlab ELAP #: 1468

ENCLOSURE (9)
△ SHEET 26 OF 26

MARE ISLAND NAVAL SHIPYARD
ENVIRONMENTAL LABORATORY
CODE 106L
Calif. DHS Certificate No. 2001

7/25/96

LAB NO: 96MI00479
DOC. NO: 61992506
ANALYSIS: POLYCHLORINATED BIPHENYLS
METHOD: Modified EPA 8080

Sample No.	Sample Type	Results	Arochlor	Report Limit
6191-0415	Swipe	ND		5ug/swipe
6191-0416	Swipe	ND		5ug/swipe
6191-0417	Swipe	ND		5ug/swipe
6191-0418	Swipe	ND		5ug/swipe
6191-0419	Swipe	ND		5ug/swipe
6191-0420	Swipe	ND		5ug/swipe
6191-0421	Swipe	ND		5ug/swipe
6191-0422	Swipe	ND - Blank		5ug/swipe
6197-0001	Swipe	ND		5ug/swipe

* First Floor, Bldg 627
Sheet 4, Encl (7)

ND = None Detected at or above reporting limit.

Analyst: D. Pruitt Reviewed by: D. T. [Signature] Date: 7/25/96

~~Page 1 of 1~~



ENCLOSURE (10)

SHEET 1 OF 13

8/15/96

QUALITY CONTROL DATA FOR NAVSEA STANDARD PROCEDURE
ANALYSIS OF SAMPLES FOR POLYCHLORINATED BIPHENYL CONTENT

LAB NUMBER	SAMPLE NUMBER	PERCENT RECOVERY**
96MI00479	6191-0415	85
	6191-0416	88
	6191-0417	103
	6191-0418	95
	6191-0419	92
	6191-0420	80
	6191-0421	82
	6191-0422	89
	6191-0423	92

*DAILY CHECK STANDARD: 109%
METHOD BLANK:NON-DETECT

*DAILY CHECK STANDARD AROCHLOR A1260 0.10 ug/ml

**SURROGATE COMPOUND 4,4'DIBROMOOCTAFLUOROBIPHENYL

**THE ACCEPTABLE SURROGATE RECOVERY LEVELS FOR SWIPES: 80-120% OR
THE RECOVERY CAN BE >120% IF THE RESULT IS <10 ug/swipe OR >20
ug/swipe.

ACCEPTABLE NON-DETECT SURROGATE RECOVERY LEVELS FOR OILS: 75-125%.
OR THE RECOVERY CAN BE <125% IF THE RESULT IS >1 ppm OR <75% IF THE
RESULT IS <1 ppm.

D.T. Umino

DAVID T. UMINO
DIRECTOR QUALITY ASSURANCE

WP\DAVE\PCB479.QA1



ENCLOSURE (10)

SHEET 2 OF 13

Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 07/16/96
Date Received: 07/18/96
Date Extracted: 07/18/96
Date Analyzed: 07/23/96
Work Order No.: 96-07-313
Method: EPA 8080A (PCBs)
Page 1 of 4

Attn: Russ Finlinson
RE: Contract No. N00244-96-D-2009

All concentrations are reported in $\mu\text{g/kg}$ (ppb).

Sample Number: 6191-0514 (627/01-C/map item location #A) Sheet 5, Enc. (7)

Analyte	Concentration	Reportable Limit
Aroclor-1016	ND	5000
Aroclor-1221	ND	5000
Aroclor-1232	ND	5000
Aroclor-1242	ND	5000
Aroclor-1248	ND	5000
Aroclor-1254	ND	5000
Aroclor-1260	ND	5000
Aroclor-1262	ND	5000

Sample Number: 6191-0515 (627/01-C/map item location #B) Sheet 5, Enc. (7)

Aroclor-1016	ND	5000
Aroclor-1221	ND	5000
Aroclor-1232	ND	5000
Aroclor-1242	ND	5000
Aroclor-1248	ND	5000
Aroclor-1254	ND	5000
Aroclor-1260	ND	5000
Aroclor-1262	ND	5000



ENCLOSURE (10)

SHEET 3 OF 13



Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 07/16/96
Date Received: 07/18/96
Date Extracted: 07/18/96
Date Analyzed: 07/23/96
Work Order No.: 96-07-313
Method: EPA 8080A (PCBs)
Page 2 of 4

Attn: Russ Finlinson
RE: Contract No. N00244-96-D-2009

All concentrations are reported in $\mu\text{g/kg}$ (ppb).

Sample Number: 6191-0516 (627/01-C/~~map item location #G~~) Sheet 5, Encl(7)

Analyte	Concentration	Reportable Limit
Aroclor-1016	ND	5000
Aroclor-1221	ND	5000
Aroclor-1232	ND	5000
Aroclor-1242	ND	5000
Aroclor-1248	ND	5000
Aroclor-1254	ND	5000
Aroclor-1260	ND	5000
Aroclor-1262	ND	5000

Sample Number: 6191-0517 (627/01-C/~~map item location #D~~) Sheet 5, Encl(7)

Aroclor-1016	ND	5000
Aroclor-1221	ND	5000
Aroclor-1232	ND	5000
Aroclor-1242	ND	5000
Aroclor-1248	ND	5000
Aroclor-1254	ND	5000
Aroclor-1260	ND	5000
Aroclor-1262	ND	5000

Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 07/16/96
Date Received: 07/18/96
Date Extracted: 07/18/96
Date Analyzed: 07/23/96
Work Order No.: 96-07-313
Method: EPA 8080A (PCBs)
Page 4 of 4

Attn: Russ Finlinson
RE: Contract No. N00244-96-D-2009

All concentrations are reported in $\mu\text{g/kg}$ (ppb).

Sample Number: Method Blank

Analyte	Concentration	Reportable Limit
Aroclor-1016	ND	1000
Aroclor-1221	ND	1000
Aroclor-1232	ND	1000
Aroclor-1242	ND	1000
Aroclor-1248	ND	1000
Aroclor-1254	ND	1000
Aroclor-1260	ND	1000
Aroclor-1262	ND	1000

Reviewed and Approved


William H. Christensen
Deliverables Manager

on 07/25/1996

ND denotes not detected at indicated reportable limit.



ENCLOSURE (10)

SHEET 5 OF 13

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 07/16/96
Date Received: 07/18/96
Date Extracted: 07/18/96
Date Analyzed: 07/23/96
Work Order No.: 96-07-313
Method: EPA 8080A (PCBs)
Page 3 of 4

Attn: Russ Finlinson
RE: Contract No. N00244-96-D-2009

All concentrations are reported in $\mu\text{g/kg}$ (ppb).

Sample Number: 6191-0518 (627/01-C/map item location #E) *Sheet 5, Encl(7)*

Analyte	Concentration	Reportable Limit
Aroclor-1016	ND	5000
Aroclor-1221	ND	5000
Aroclor-1232	ND	5000
Aroclor-1242	ND	5000
Aroclor-1248	ND	5000
Aroclor-1254	ND	5000
Aroclor-1260	ND	5000
Aroclor-1262	ND	5000

Sample Number: 6191-0519 (627/01-C/map item location #F) *Sheet 5, Encl(7)*

Aroclor-1016	ND	5000
Aroclor-1221	ND	5000
Aroclor-1232	ND	5000
Aroclor-1242	ND	5000
Aroclor-1248	ND	5000
Aroclor-1254	ND	5000
Aroclor-1260	ND	5000
Aroclor-1262	ND	5000

ENCLOSURE (10)



SHEET 6 OF 13

Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 07/16/96
Date Received: 07/18/96
Date Extracted: 07/18/96
Date Analyzed: 07/23/96
Work Order No.: 96-07-313
Method: EPA 8080A (PCBs)
Page 4 of 4

Attn: Russ Finlinson
RE: Contract No. N00244-96-D-2009

All concentrations are reported in $\mu\text{g/kg}$ (ppb).

Sample Number: Method Blank


Analyte	Concentration	Reportable Limit
Aroclor-1016	ND	1000
Aroclor-1221	ND	1000
Aroclor-1232	ND	1000
Aroclor-1242	ND	1000
Aroclor-1248	ND	1000
Aroclor-1254	ND	1000
Aroclor-1260	ND	1000
Aroclor-1262	ND	1000

Reviewed and Approved


William H. Christensen
Deliverables Manager

on 07/25/1996

ND denotes not detected at indicated reportable limit.

ENCLOSURE (10)
 SHEET 7 OF 13

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

QUALITY ASSURANCE SUMMARY
Method EPA 8080A (PCBs only)

Mare Island Naval Shipyard
Page 1 of 1

Work Order No.:
Date Analyzed:

96-07-313
07/23/96

LCS/LCS Duplicate

Analyte	LCS%REC	LCSD%REC	Control Limits	%RPD	Control Limits
Aroclor-1260	72	73	50 - 135	1	0 - 25

Surrogate Recoveries (in %)

Sample Number	S1	S2
6191-0514	86	
6191-0515	82	
6191-0516	81	
6191-0517	83	
6191-0518	78	
6191-0519	309 ^{Note 1}	89
Method Blank	93	81

Surrogate Compound	%REC Acceptable Limits
S1 > Decachlorobiphenyl (DCB)	50 - 130
S2 > 2,4,5,6-Tetrachloro-m-Xylene	50 - 130

Note 1. The out of range surrogate is due to a matrix interference effect and not to an out of control analytical process. S2 (2,4,5,6-Tetrachloro-m-Xylene) falls within range, therefore no further action is necessary.

Reviewed and approved: William H. Christensen on 07/23/1996
William H. Christensen
Deliverables Manager

ENCLOSURE (10)

A SHEET **B** OF **13**

MARE ISLAND NAVAL SHIPYARD
ENVIRONMENTAL LABORATORY
CODE 106L
Calif. DHS Certificate No. 2001

8/12/96

LAB NO: 96MI00515
DOC. NO: 62202568
ANALYSIS: POLYCHLORINATED BIPHENYLS
METHOD: Modified EPA 8080

Sample No.	Sample Type	Results	Arochlor	Report Limit
6208-0190	Swipe	ND		5ug/swipe
6208-0191	Swipe	ND		5ug/swipe
6208-0192	Swipe	ND		5ug/swipe
6208-0193	Swipe	ND		5ug/swipe
6208-0194	Swipe	ND		5ug/swipe
6208-0195	Swipe	ND		5ug/swipe
6208-0196	Swipe	ND		5ug/swipe
6208-0197	Swipe	ND		5ug/swipe
6208-0198	Swipe	ND		5ug/swipe
6208-0199	Swipe	ND		5ug/swipe
6208-0200	Swipe	ND		5ug/swipe
6208-0201	Swipe	ND		5ug/swipe
6208-0202	Swipe	ND		5ug/swipe
6208-0203	Swipe	ND		5ug/swipe
6208-0204	Swipe	ND		5ug/swipe
6208-0205	Swipe	ND		5ug/swipe
6208-0206	Swipe	ND		5ug/swipe
6208-0207	Swipe	ND		5ug/swipe
6208-0253	Swipe	ND		5ug/swipe
6208-0254	Swipe	ND		5ug/swipe
6208-0255	Swipe	ND		5ug/swipe
6208-0256	Swipe	ND		5ug/swipe
6208-0257	Swipe	ND		5ug/swipe
6208-0258	Swipe	ND		5ug/swipe
6208-0259	Swipe	ND		5ug/swipe
6208-0260	Swipe	ND		5ug/swipe
6208-0261	Swipe	ND		5ug/swipe
6208-0262	Swipe	ND		5ug/swipe
6208-0263	Swipe	ND - Blank		5ug/swipe

* Post Cleanup, First Floor, Bldg 627, Encl (8)

ND = None Detected at or above reporting limit.

Analyst: D. Pruitt Reviewed by: D.T. Curran Date: 8/12/96

8/15/96

QUALITY CONTROL DATA FOR NAVSEA STANDARD PROCEDURE
ANALYSIS OF SAMPLES FOR POLYCHLORINATED BIPHENYL CONTENT

LAB NUMBER	SAMPLE NUMBER	PERCENT RECOVERY**
96MI00515	6208-0190	109
	6208-0191	103
	6208-0192	106
	6208-0193	105.
	6208-0194	108
	6208-0195	98
	6208-0196	115
	6208-0197	104
	6208-0198	105
	6208-0199	102
	6208-0200	108
	6208-0201	101
	6208-0202	109
	6208-0203	98
	6208-0204	99
	6208-0205	97
	6208-0206	98
	6208-0207	104
	6208-0253	102
	6208-0254	96
	6208-0255	113
	6208-0256	103
	6208-0257	92
	6208-0258	103
	6208-0259	98
	6208-0260	110
	6208-0261	101
	6208-0262	92
	6208-0263	93

*DAILY CHECK STANDARD: 104%
METHOD BLANK:NON-DETECT



ENCLOSURE (10)

SHEET 10 OF 13


*DAILY CHECK STANDARD AROCHLOR A1260 0.10 ug/ml
**SURROGATE COMPOUND 4,4'DIBROMOOCTAFLUOROBIPHENYL
**THE ACCEPTABLE SURROGATE RECOVERY LEVELS FOR SWIPES: 80-120% OR
THE RECOVERY CAN BE >120% IF THE RESULT IS <10 ug/swipe OR >20
ug/swipe.

ACCEPTABLE NON-DETECT SURROGATE RECOVERY LEVELS FOR OILS: 75-125%.
OR THE RECOVERY CAN BE <125% IF THE RESULT IS >1 ppm OR <75% IF THE
RESULT IS <1 ppm.

D.T. Umino

DAVID T. UMINO
DIRECTOR QUALITY ASSURANCE

WP\DAVE\PCB515.QA1

ENCLOSURE (10)
 SHEET 11 OF 13



Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94592-5100

Date Sampled: 08/06/96
Date Received: 08/08/96
Date Extracted: 08/08/96
Date Analyzed: 08/09/96
Work Order No.: 96-08-197
Method: EPA 8080A (PCBs)
Page 1 of 1

Attn: Russ Finlinson
RE: Contract No. N00244-96-D-2009

All concentrations are reported in µg/L (ppb).

Sample Number: 6208-0271 (627/01-C/twd #96-1280 #29) *sample of holding tank, post cleanup first floor, Bldg 62*

Analyte	Concentration	Reportable Limit
Aroclor-1016	ND	10
Aroclor-1221	ND	10
Aroclor-1232	ND	10
Aroclor-1242	ND	10
Aroclor-1248	ND	10
Aroclor-1254	ND	10
Aroclor-1260	14.7	10
Aroclor-1262	ND	10

Sample Number: Method Blank

Aroclor-1016	ND	1.00
Aroclor-1221	ND	1.00
Aroclor-1232	ND	1.00
Aroclor-1242	ND	1.00
Aroclor-1248	ND	1.00
Aroclor-1254	ND	1.00
Aroclor-1260	ND	1.00
Aroclor-1262	ND	1.00

Reviewed and Approved

William H. Christensen
William H. Christensen
Deliverables Manager

on 8/13/1996

ND denotes not detected at indicated reportable limit.



ENCLOSURE (10)
SHEET 12 OF 13

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

QUALITY ASSURANCE SUMMARY
Method EPA 8080A (PCBs only)

Mare Island Naval Shipyard
Page 1 of 1

Work Order No.:
Date Analyzed:

96-08-197
08/09/96

LCS/LCS Duplicate

Analyte	LCS%REC	LCSD%REC	Control Limits	%RPD	Control Limits
Aroclor-1260	99	87	50 - 135	12	0 - 25

Surrogate Recoveries (In %)

Sample Number	S1	S2
6208-0271	20 ^{Note 1}	44 ^{Note 1}
Method Blank	92	89

Surrogate Compound	%REC Acceptable Limits
S1 > Decachlorobiphenyl (DCB)	50 - 130
S2 > 2,4,5,6-Tetrachloro-m-Xylene	50 - 130

Note 1. The surrogate recovery was out of control due to a matrix interference effect. The batch method blank surrogate was in control and, hence, the associated sample data was reported with no further corrective action required.

Reviewed and approved:

William H. Christensen
William H. Christensen
Deliverables Manager

on 08/13/1996



ENCLOSURE (10)

SHEET 13 OF 13